



**BLACKHAM**  
Resources Limited

ASX Announcement  
21 October 2015

**BOARD OF DIRECTORS**

**Paul Murphy**  
(Non-Executive Chairman)  
**Bryan Dixon**  
(Managing Director)  
**Alan Thom**  
(Executive Director)  
**Greg Miles**  
(Non-Executive Director)  
**Peter Rozenauers**  
(Non-Executive Director)

**ASX CODE**  
BLK

**CORPORATE INFORMATION**  
198.4M Ordinary Shares  
36.9M Unlisted Options  
9.5M Performance Rights

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## Matilda PFS Confirms Robust Economics

- Preliminary Feasibility Study (“PFS”) demonstrates very strong economics for the Matilda Gold Project

### PFS Highlights

• Mining Inventory	6.0Mt @ 2.8g/t for 540,000oz
• Initial Life of Mine	4 years & 9 months
• Average Annual Production	98,000oz
• LOM C1 Cash Costs	A\$920/oz
• LOM AISC Cost	A\$1,150/oz
• Gross Revenue	A\$720M @ A\$1,550/oz
• Operating Cash Flow	A\$185M
• Pre-Production Capital Costs	A\$28.0M
• NPV <sub>5%</sub> before corp & tax	A\$124M or A\$0.62/share
• Payback	14 months
• IRR before corp & tax	105%

- Rapid low capital pathway to being a significant gold producer
- Definitive Feasibility Study (“DFS”) work programmes well advanced and due for completion by January 2016
- Initial Ore Reserve Estimate of 270,000oz demonstrates high conversion of Scoping Mineral Inventory into Reserves
- PFS adds additional year of mine life with significant growth potential with ongoing drill programmes

Blackham Managing Director Bryan Dixon - “The Matilda Gold Project PFS has confirmed the robust cash flows that will be generated by the Project, its capital efficient nature and that it can be brought into production rapidly. The DFS drill programmes and studies are well advanced enabling the DFS to be completed by January 2016. Since finalising the PFS Resource, we have enjoyed significant exploration success and we plan to keep growing the mine life through aggressive drilling programmes. It is an exciting time as we look to transition Blackham into Western Australia’s next significant gold producer.”

### Cautionary Statement

Blackham has concluded it has reasonable basis for providing the forward looking statements included in this announcement (see Appendix 1). The detailed reasons for that conclusion are outlined throughout this announcement and Material Assumptions are disclosed in Appendix 2.

### Cautionary Statement (Cont'd).

This announcement has been prepared in accordance with the JORC Code (2012) and the ASX Listing Rules. The Company advises that the Pre-Feasibility Study results, Production Targets and Forecast Financial Information contained in this announcement are preliminary in nature as the conclusions are based on medium-level technical and economic assessments, and are insufficient to support the estimation of Ore Reserves over all of the Production Targets or to provide an assurance of economic development at this stage. There is a lower level of geological confidence associated with Inferred Mineral Resources used in this report and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised. The stated Production Target is based on the Company's current expectations of future results or events and should not be relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish further confidence that this target will be met.

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Blackham Resources Ltd ("Blackham" or "the Company") (ASX: BLK) is pleased to announce the completion of the Preliminary Feasibility Study ("PFS") on its 100% owned Matilda Gold Project ("Project").

### Summary

The Company is very pleased to have confirmation of the Project's robust economics including a low capital requirement, short timeframe to production, fast payback and operating costs in line with its Western Australian peers. The very low capex required for the Project is due the substantial plant and infrastructure at site and the relatively minor plant refurbishments required to re-start the Project.

The PFS process has added an additional year to the mine life that was forecast in the Scoping Study which results in a significant improvement to the Project's economics. The PFS confirmed strong conversion of Inferred Resources into Indicated Resources and Scoping Mineral Inventory into Reserves. Since finalising the PFS Resources Blackham has enjoyed significant exploration success at Golden Age and Matilda and is awaiting drill results from Galaxy and Williamson drilling programmes.

Blackham is pleased to report that the results of the PFS show similar economics to the Scoping Study (refer ASX announcement 19 December 2014) but with a longer mine life and a superior confidence level improving from +/- 35% to +/- 25%. The results of the PFS confirm that the mining and processing parameters are very similar to the results of the Scoping Study which demonstrate Blackham's sound understanding of the technical and operational aspects of the Project and further de-risks the development of the Matilda Gold Project.

Blackham has a very experienced team in gold exploration, development and operations. The existing plant and infrastructure and the processing of soft Matilda oxides from open pits at the beginning of the mine schedule equates to a low risk start up strategy.

Blackham is also making significant progress on the DFS with drilling programmes and resource, metallurgical, environmental and engineering studies already underway. This work is expected to enable Blackham to complete the DFS in a significantly condensed timeframe and will further de-risk the Project by increasing the confidence levels to +/- 10% or +/-15% range.

### Geology

The Matilda Gold Project's **44Mt @ 3.3g/t for 4.7Moz** gold Resources are to JORC 2012 standard (see Table 1) and are all within a 20km radius of the Wiluna Gold Plant.

At least **20Mt @ 3.5g/t for 2.3Moz** (48%) are in the Indicated Resource category.

Mining Centre	Measured			Indicated			Inferred			Total 100%		
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Matilda Mine	0.2	2.1	13	6.7	1.8	381	5.7	1.7	311	12.5	1.8	705
Williamson Mine				2.7	1.7	150	3.6	1.7	200	6.3	1.7	350
Regent				0.7	2.7	61	3.1	2.1	210	3.9	2.2	270
Galaxy				0.2	3.3	25	0.3	2.6	26	0.6	2.9	51
Golden Age				0.2	8.0	45	0.4	6.1	80	0.6	6.7	125
Bulletin South OP				0.9	3.2	90	1.7	3.5	190	2.6	3.4	280
East Lode				1.0	5.2	170	2.3	4.7	340	3.3	4.8	510
West Lode Calvert				1.4	5.5	240	2.8	5.2	460	4.2	5.3	700
Henry 5 - Woodley - Bulletin Deepes				2.1	5.9	400	0.8	4.6	120	2.9	5.6	520
Burgundy - Calais				1.3	6.0	250	0.3	5.7	60	1.6	6.0	310
Happy Jack - Creek Shear				1.5	5.9	290	1.3	4.8	200	2.9	5.4	490
Other Wiluna Deposits				1.1	3.1	111	1.7	4.2	229	2.8	4.1	340
<b>Total</b>	<b>0.2</b>	<b>2.1</b>	<b>13</b>	<b>20</b>	<b>3.5</b>	<b>2,213</b>	<b>24</b>	<b>3.1</b>	<b>2,426</b>	<b>44</b>	<b>3.3</b>	<b>4,651</b>

Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location shape and continuity of the occurrence and on the available sampling results. The figures in the above table are rounded to two significant figures to reflect the relative uncertainty of the estimate.

The Matilda Mine Resource Estimate has been updated with results of drilling programmes undertaken up until August 2015. The results of drilling programmes undertaken at Matilda, Galaxy and Williamson in September and October have not been included in the PFS but will be used to revise the Resource Estimate as part of the DFS.

## **Mining and Mining Inventory**

Mining at the Matilda Gold Project will be undertaken by mining contractors with all management and technical services undertaken by Blackham personnel. The Project will operate as a Fly In, Fly Out (FIFO) operation from Perth with local residents employed where possible. PFS mine designs were completed on the main mining centers at Matilda, Galaxy, Williamson and Wiluna.

Open pit mining is planned for Matilda, Williamson and Galaxy and will all utilise a standard truck and excavator mining technique involving conventional drill, blast, load and haul. Ore will be hauled by road train to the Company's gold processing plant located at Wiluna ("Wiluna Gold Plant"). In addition to the mining fleet, ancillary plant consisting of tracked bulldozers, wheel loaders, graders and water carts will be required. The ancillary fleet will prepare drill and blast areas, maintain active digging areas, mine roads and waste dumps. Ore will be delivered to the ROM pad at the plant site by trucks and then fed to the treatment plant via a ROM loader.

Two underground mines have been designed at Wiluna, the first being the Golden Age underground, which is accessed from the existing Bulletin Portal and current Golden Age decline. The East West Underground is the second underground mine that is also accessed from existing underground infrastructure and portal access from East Pit. Ore from the underground mines will be extracted using the long hole open stoping technique in a top down sequence. Suitable pillars are left behind to ensure ground stability during the mining. Ore is trucked to the surface and then hauled to the treatment plant

Of the open pit and underground mining studies completed to date the **PFS Mining Inventory contains 6.0Mt and 465,000oz Au** recovered over 4 years and 9 months. The Mineral Inventory under the PFS has grown 58,000oz from the Scoping Study.

**Table 2: Matilda PFS v Scoping Mining Inventory**

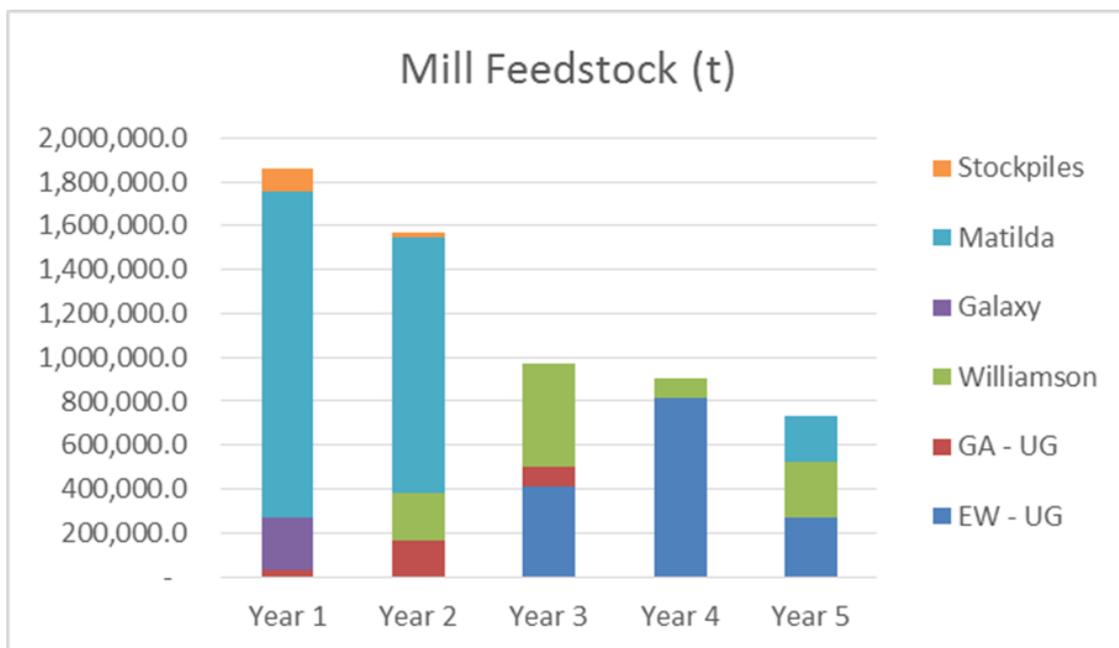
		PFS Production		Scoping Production			
		Average Annual	LOM	Average Annual	LOM	Variance	%
Mine life	mths		57		46	11	24%
Tonnes Milled	t	1,272,000	6,040,000	1,301,000	4,987,000	1,053,000	21%
Processed Grade	g/t	2.8	2.8	2.8	2.8	0	0%
Recovery	%	86%	86%	90%	90%	-4%	-4%
<b>Recovered Ounces</b>	<b>oz</b>	<b>98,000</b>	<b>465,000</b>	<b>105,000</b>	<b>407,000</b>	<b>58,000</b>	<b>14%</b>

**Production Schedule**

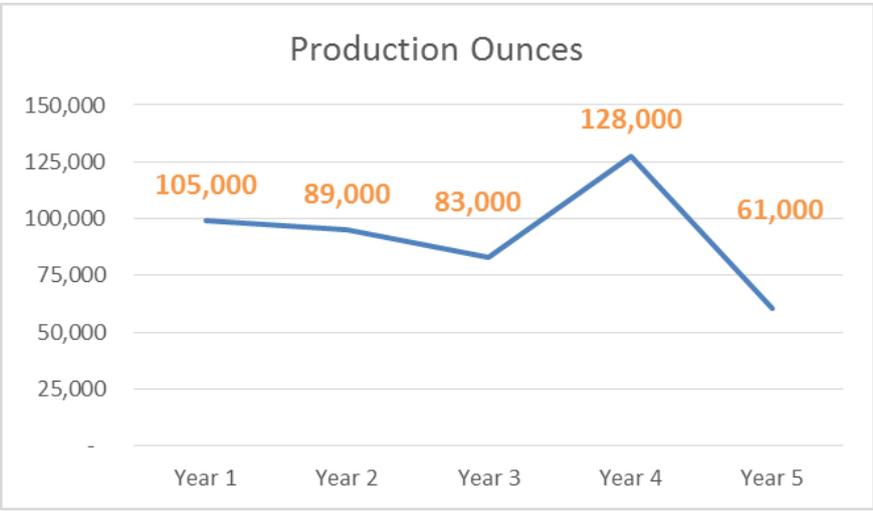
The PFS mine designs have been used to schedule a production profile for the Matilda Gold Project. The mining inventory associated with the higher confidence Measured and Indicated Mineral Resources are scheduled in the early years of the project.

The following charts show the production profile over the initial LOM. Chart 1 displays the production profile of the mining inventory of the operation. The open pit operations are the primary source of ore in the first 12 months with the underground operation commencing in the second year. The key features of the production schedule include;

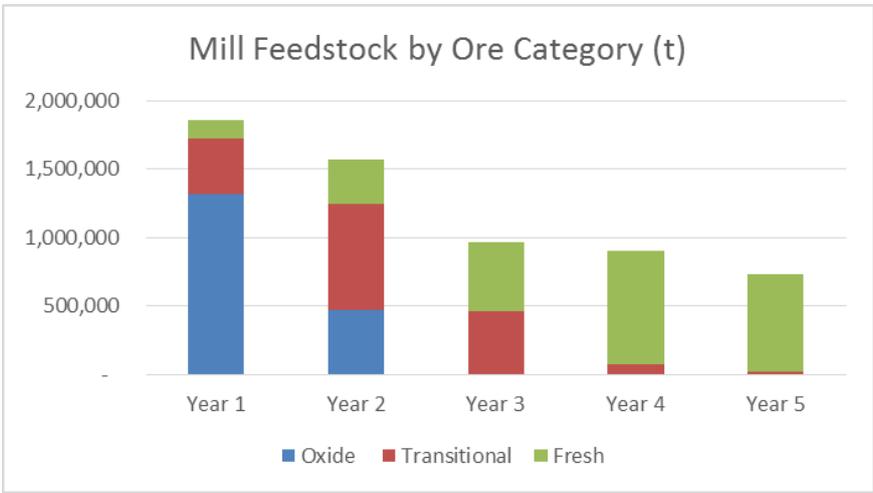
- LOM of 4 years 9 months delivering 540,000 ounce mine production (Chart 2)
- Estimated average annual production of 98,000oz
- Production peak of 128,000oz (Chart 2)
- Total Mine production estimated at 6.0Mt @ 2.8g/t for 540,000 ounces (Charts 1 and 2)
- Open pit production total of 4.2Mt @ 1.75g/t (Chart 4)
- Underground production total of 1.8Mt @ 5.3g/t



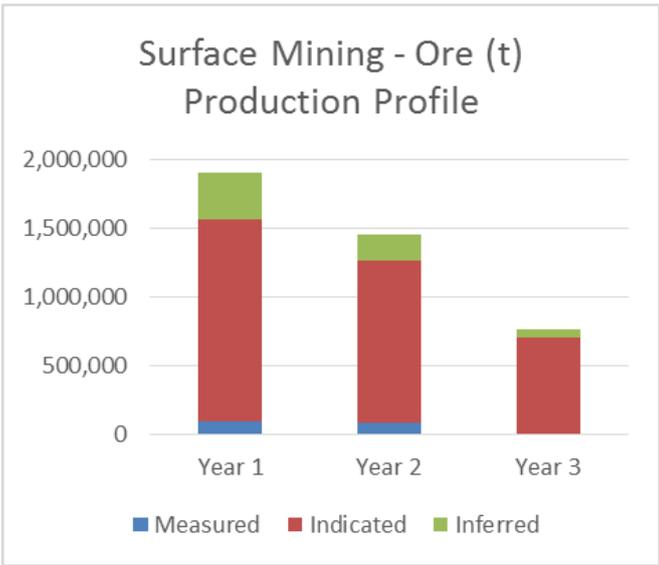
**Chart 1: LOM Mill Feedstock**



**Chart 2: LOM Annual Gold Production**



**Chart 3: LOM Mill Feed Material Type**



**Chart 4: Surface Mining Resource Classification**

	<b>Tonnes</b>	<b>Grade</b>	<b>Ounces</b>	<b>%</b>
Measured	175,000	1.9	10,900	2%
Indicated	4,156,000	2.3	311,300	58%
Inferred	1,707,000	4.0	216,900	40%
<b>Total</b>	<b>6,038,000</b>	<b>2.8</b>	<b>539,100</b>	

Calculations have been rounded to the nearest 1,000 t or ore, 0.1g/t Au grade and 100 oz Au metal.

**Table 3: Mineral resource classification of the Matilda Gold Project Mining Inventory**

Table 3 above summarises the respective Mineral Resource Estimation classification (by ounces) that are used in the potential Matilda Gold Project mining inventory. For the 539,100 ounce LOM total, 60% is classified as Measured and Indicated Mineral Resource, and 40% as Inferred Mineral Resource.

The Mining Inventory includes Matilda, Galaxy, Golden Age, Williamson deposits and East/West Lodes. All these deposits except Galaxy have been previously processed through the Wiluna Gold Plant. The open pit resources which are mined in the first 3 years have 86% of the in pit resources now to a Measured and Indicated resource category. Over the last 2 months additional infill drilling at Matilda, Galaxy and Williamson has aimed at further upgrading the resource confidence in these pits.

The underground resources, which are processed toward the end of the current mine life, have 38% of all resources in the Indicated category. An additional infill drill programme has been completed at Golden Age since the underground resources were last estimated. Blackham notes that over 97% of the Inferred Resources in the Mineral Inventory are coming from deposits that have a previous mining history, giving further confidence to the grade of these Inferred Resources. The Company also notes the Wiluna goldfield has a long history of converting Inferred Mineral Resources to Indicated Mineral Resources with ongoing drilling.

The proportion of Inferred material contained within the mine plan has been reviewed by independent mining consultants Entech Pty Ltd ('Entech') and is considered to be commensurate with comparable projects at this level of study. The Company believes there is a reasonable expectation that a material conversion of Inferred Mineral Resources to Indicated Mineral Resources will occur from infill drilling at the Matilda Gold Project as it progresses through the DFS.

Resources of a further 38Mt @ 3.3g/t for 4.1Moz (48% of which are Indicated Resources) are sitting outside the above Mineral Inventory. Blackham is continuing to review its mining and processing studies with a view to bringing further deposits and resources into the mine life prior to completion of the DFS.

### **Statement of Reserves**

Entech was commissioned by Blackham to provide an independent Ore Reserve Estimate update for the Matilda Gold Project as at 19 October 2015. The Ore Reserve Estimate is based on JORC-compliant Mineral Resource Estimates as provided to Entech. The Ore Reserve has been calculated in conjunction with the PFS for the Project and is underpinned by that study.

Measured and Indicated Resources have been converted to Proven and Probable Ore Reserves subject to mine design physicals and an economic evaluation. A detailed financial model for the Project was generated by Entech as part of the Study process and this has been used to determine economic viability of the Ore Reserve Estimate.

Mine	Classification	Tonnes (t)	Grade (g/t)	Metal (oz. Au)
<b>OPEN PIT</b>				
Total Matilda Pits	Proved	175,000	1.9	10,900
Total Matilda Pits	Probable	2,296,000	1.8	131,700
<i>Total Matilda Pits</i>	<i>Total</i>	<i>2,471,000</i>	<i>1.8</i>	<i>142,600</i>
Galaxy	Proved	0	0.0	0
Galaxy	Probable	184,000	3.0	18,100
<i>Galaxy</i>	<i>Total</i>	<i>184,000</i>	<i>3.0</i>	<i>18,100</i>
<b>UNDERGROUND</b>				
East West	Proved	0	0.0	0
East West	Probable	504,000	5.5	88,900
<i>East West</i>	<i>Total</i>	<i>504,000</i>	<i>5.5</i>	<i>88,900</i>
Golden Age	Proved	0	0.0	0
Golden Age	Probable	81,000	5.4	14,000
<i>Golden Age</i>	<i>Total</i>	<i>81,000</i>	<i>5.4</i>	<i>14,000</i>
<b>STOCKPILES</b>				
Williamson Stockpile	Proved	0	0.0	0
Williamson Stockpile	Probable	100,000	1.4	4,400
<i>Williamson Stockpile</i>	<i>Total</i>	<i>100,000</i>	<i>1.4</i>	<i>4,400</i>
Wiluna Stockpile	Proved	0	0.0	0
Wiluna Stockpile	Probable	22,000	3.1	2,100
<i>Wiluna Stockpile</i>	<i>Total</i>	<i>22,000</i>	<i>3.1</i>	<i>2,100</i>
Golden Age Stockpile	Proved	0	0.0	0
Golden Age Stockpile	Probable	2,000	6.2	400
<i>Golden Age Stockpile</i>	<i>Total</i>	<i>2,000</i>	<i>6.2</i>	<i>400</i>
<b>OPERATION TOTALS</b>				
Operation Total	Proved	175,000	1.9	10,900
Operation Total	Probable	3,189,000	2.5	259,400
<i>Operation Total</i>	<i>Total</i>	<i>3,364,000</i>	<i>2.5</i>	<i>270,300</i>

Calculations have been rounded to the nearest 1,000 t of ore, 0.1 g/t Au grade and 100 oz. Au metal. Assumes a gold price of A\$1,550/oz

**Table 4: Ore Reserve Estimate (October 2015) for the Project.**

## Geotechnical Studies

Geotechnical assessments were conducted by Peter O'Bryan and Associates on the proposed open pits and underground operations. The Geotechnical worked undertaken involved diamond drilling for core samples, laboratory testing, logging and photogrammetric mapping. The geotechnical analysis is to a suitable level of detail for the PFS and forms the basis of pit wall design criteria, underground stope sizes and pillar designs, underground mining factors, underground development design and support assumptions.

## Hydrology

In addition to evaluation of sustainable water supply to the Wiluna Gold Plant, a Knight Piesold review of the Project's hydrological data was completed, including an examination of existing data on Matilda and Williamson Open Pits, plus the new pits at Galaxy and M10. Models of the hydrological systems were developed to estimate pit dewatering and provide preliminary water management strategies.

## Mine Designs

The mining methods chosen are well-known and widely used in the local mining industry and production rates and costings can be predicted with a suitable degree of accuracy. Suitable access exists for all mines, allowance has been made for earthworks and infrastructure requirements including haul road construction and clearing for site facilities and mining areas.

The Matilda Gold Project's open pits are all within a 20 kilometre radius of the Wiluna Gold Plant with haulage distances for Galaxy, Matilda and Williamson being 15, 18 and 26 kilometres respectively. Current open pit contractor quotes were obtained for optimisation and cost estimations on each of the mining areas. Optimum pit shells were selected for detailed open pit designs. Further details of the open pit designs and fleet can be found in Appendix 2. The resultant mine designs are shown in the figures below.

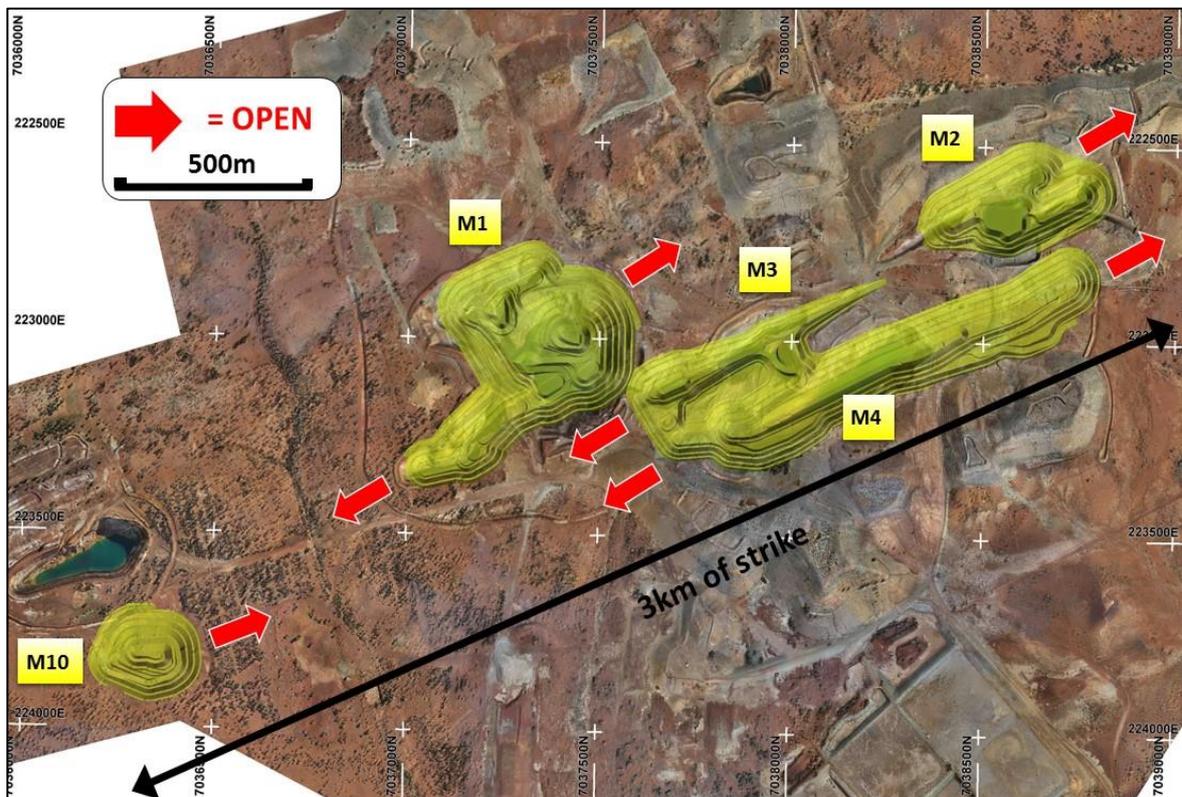


Figure 1: Matilda Open Pit designs



Figure 2: Galaxy and Williamson Pit Designs

### Golden Age & East West Underground

Underground production at East-West and Golden Age will be predominantly mined from top-down via mechanised longhole open stoping with in-situ pillars retained for stability. Diesel powered trucks and loaders will be used for materials handling. Diesel-electric jumbo drill rigs will be used for development and ground support installation. Details of the design criteria and mine design parameters are outlined in Section 4 of Appendix 2.

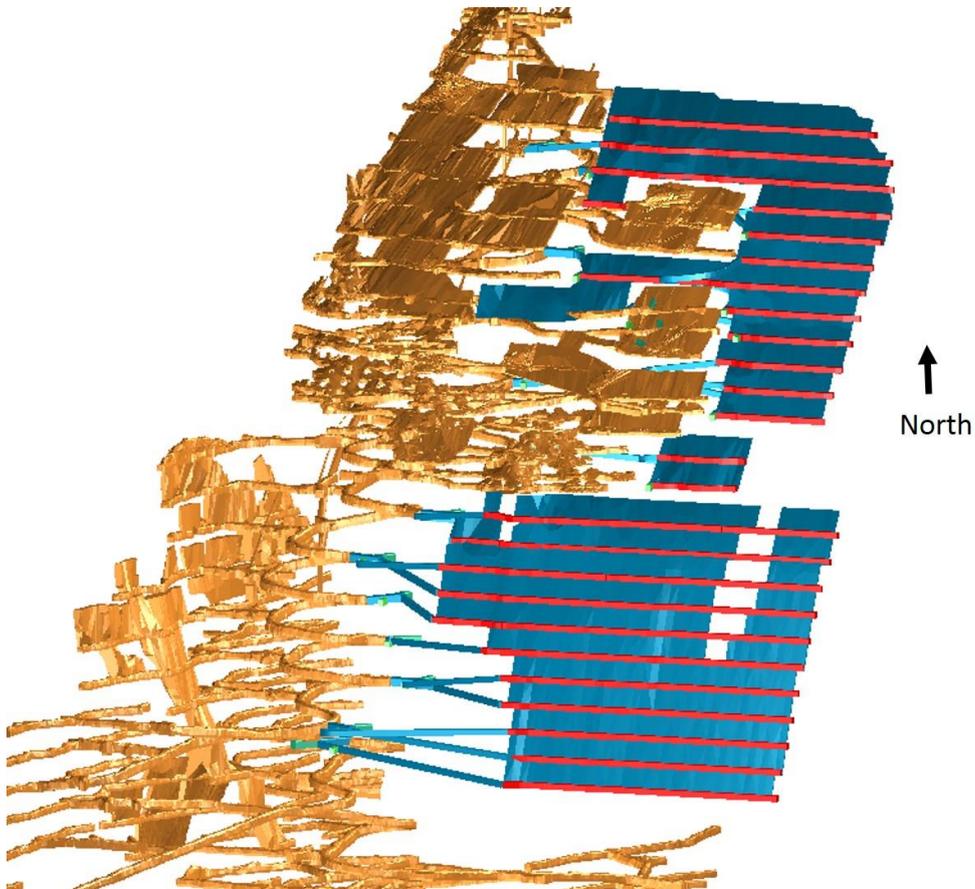


Figure 3: Golden Age Underground

## East West Underground

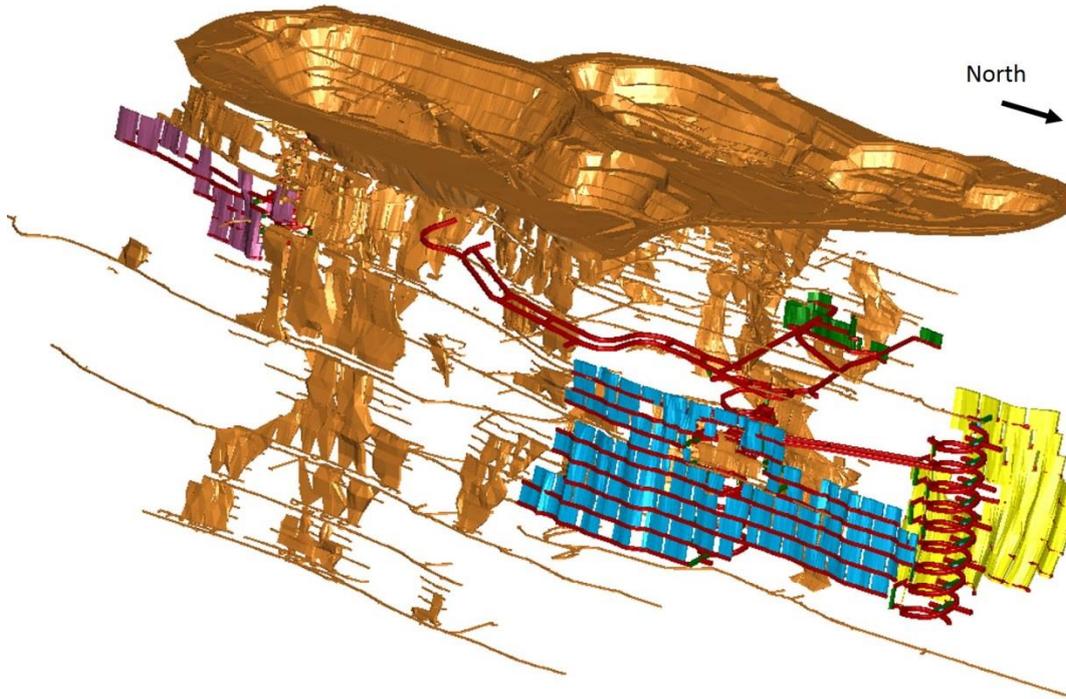


Figure 4: East West Underground

## Processing

The Matilda Mine PFS metallurgical test work has been applied to optimising the milling capability of the Matilda Gold Project ores through the 100% owned Wiluna Gold Plant. The initial processing route will be crush, grind, gravity, CIL, elution into the gold room as seen in Figure 5. The free milling ore is to be initially processed through both Mill 1 and Mill 2 for an average current LOM throughput of 1.272Mtpa. The metallurgical recoveries from the open pits is estimated to average 88% which is consistent with the previous production from the Matilda and Williamson orebodies.

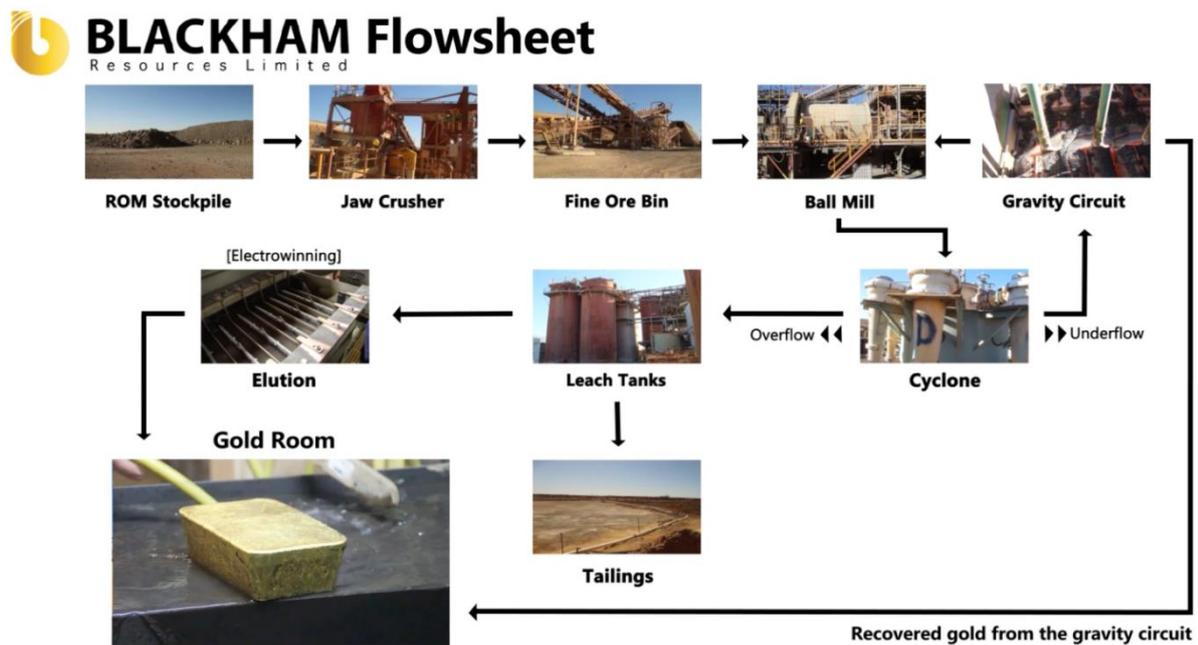


Figure 5: Initial Processing Plant Flowsheet

A metallurgical evaluation of Matilda, Galaxy and Wiluna ores was commenced by Blackham in 2015. The aim was to determine the metallurgical performance of the ores in terms of:

- Process applicability to the Wiluna Gold Plant;
- Overall gold recovery;
- Processing properties;
- Ability to blend different ore sources

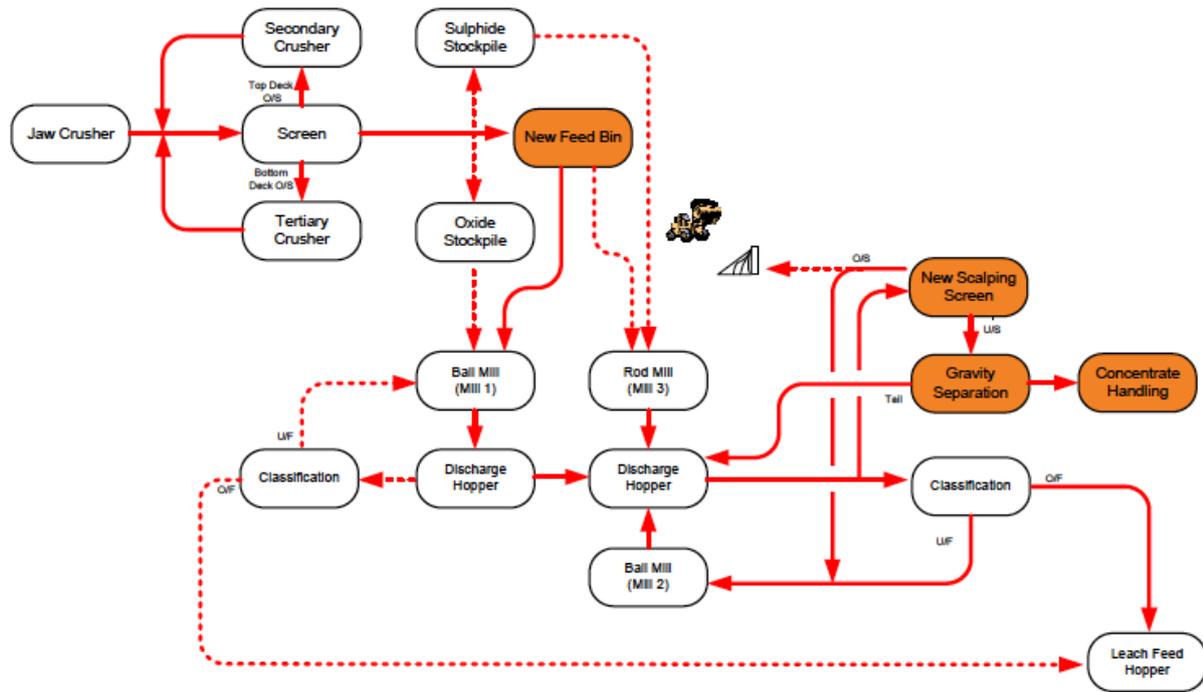
The program of test work included investigation of:

- Comminution characteristics
- Gravity amenability
- XRD Mineralogy
- Leaching characteristics and reagent consumptions
- Thickening and Rheology

It is predicted that the overall metallurgical performance achievable from Matilda will be 87.7% gold recovery, Williamson 86.6%, Golden Age 91.9% and Galaxy 95.8%. Gravity recovery will be incorporated within the milling circuit as most ores benefitted from gravity recovery through reduced leach times. The gravity recovery is important for the reduction of reagent costs, higher recovery and increase in leach kinetics which becomes important with higher throughput.

Bond ball work indices for the ores were particularly variable, ranging from very soft for Matilda oxide and transitional, to moderately hard for Williamson and Galaxy deposits. Mill throughput becomes a limiting factor with the harder ores and rheology becomes a limiting factor with the soft ores. Blending of harder and softer ores will be used to optimise throughputs to mitigate the limiting factors of each. Milling options were limited to utilising the existing Wiluna Processing Plant (WPP) without significant modifications to major items of equipment. The existing dual milling circuits will be utilised as a single circuit containing a single gravity circuit. Mill 1 will be single pass open circuit and Mill 2 will be closed by cyclones. Mill 3 will be utilised for treatment of scats and the very hard Golden Age ore.

Grinding circuit modelling has produced a range of different ore types within the PFS. A range of work indices has been used to simulate different blends expected to be treated through the milling circuit as well as modelling for each ore type. The Wiluna Gold Plant's processing rate of 1.8-2.0Mtpa assumes the ability to leverage the softness of certain ores through perfect blending. DFS modelling will be enabled by more certainty of the mine plan to optimise the throughput. Different configurations have been modelled to optimise the circuit given the expected feed, the desire to minimise startup capital and provide flexibility for a wide variety of feed types. Orway Mineral Consultants have modelled several different configurations and settled on the one shown in figure 6.



**Figure 6: Wiluna Crushing and Milling Flowsheet with changes to the flowsheet in Orange**

Wiluna refractory mineralisation has previously been treated commercially through the Wiluna process plant for 15 years from 1992 to 2007 and for 5 years from 2008 to 2013. Historical reports show Wiluna ores (excluding Quartz reef ores) are refractory, with most gold occurring in either solid solution or as sub-microscopic particles within fine-grained sulphides. For the 8 year period from July 1999 to July 2007 for which data is readily available the Wiluna plant averaged 82.7% gold recovery from a feed grade of 5.5g/t.

During the PFS a sample of East Lode ROM ore was sent to AAML metallurgical laboratories in NSW for comminution and flotation testwork. The testwork was a series of flotation tests using previously optimised flotation reagent schedules, where successive tests were looking to optimise grind. Flotation testing returned an optimised grind of 63-75µm. Overall float concentrate Au recoveries ranged from 86.8% to 88.7%, with finer grinding achieving a marginal improvement to the overall Au recovery.

### Wiluna Plant Refurbishment

The initial start-up capital to re-commission the Matilda Gold Project is estimated at \$28.0 million. These funds are planned to be spent in the five months following development decision. The Project becomes cash flow positive within 6 months of development decision. The initial capital of \$28.0M represents the maximum cash deficiency prior to the project being cash flow positive.



**Photo 1: Wiluna Gold Plant**

The initial capital includes \$17.5 million to refurbish the Wiluna Gold Plant and construct tailings dam extensions as estimated by independent consultants and contractors. The refurbishment of the plant assumes an EPCM contractor is appointed to manage this process. The Company has also had initial discussions with power contractors interested in owning the power station and selling the project power over the fence. Pre-production mining and working capital of \$11.6 million is also needed to commence operations.

Como Engineers conducted a site visit and engineering study of the Wiluna plant to determine a cost estimate and scope of works for the refurbishment of the plant. The main areas of refurbishment at the Wiluna plant include ROM wall, Mill 2 concrete plinths and foundations, overhead power lines and poles, Mill 1 feed bin and concrete vault, leach and adsorption tanks. The estimated cost to carry out the refurbishment of the Wiluna Gold Plant is \$14 million. This cost includes a contingency of approximately 16%, which is commensurate with the level of study undertaken.

The above cost estimates include the following optional costs:

- New gravity circuit - \$1.94 million
- Mill 2 replacement girth gear (supply & install) - \$0.64 million
- New mill liners (supply & install) - \$0.30 million
- Installation of fine ore transfer conveyor & feed bins - \$0.70 million

It is envisaged that the plant refurbishment works would take between 4 to 5 months to complete from award of contract. Blackham now plans to commit to long lead items required for the refurbishment works.

### **Tailings Dam**

Blackham engaged Knight Piésold to undertake a pre-feasibility design of the Wiluna tailings disposal system, pit dewatering and water management strategy. The projected tonnage for this first phase is 5.0Mt. Based on the options analysis it was decided to proceed with a tailings disposal system consisting of utilisation of two facilities as follows:

- Dam H – an existing TSF to the south west of the plant site.
- Dam J – this is a planned TSF which integrates a number of existing TSF dams into a single facility.

## Operating Costs

The Matilda Gold Project C1 cash costs and cash operating costs (AISC- all in sustaining) are forecast to be A\$922/oz and A\$1,148/oz, respectively at a gold price of A\$1,550.

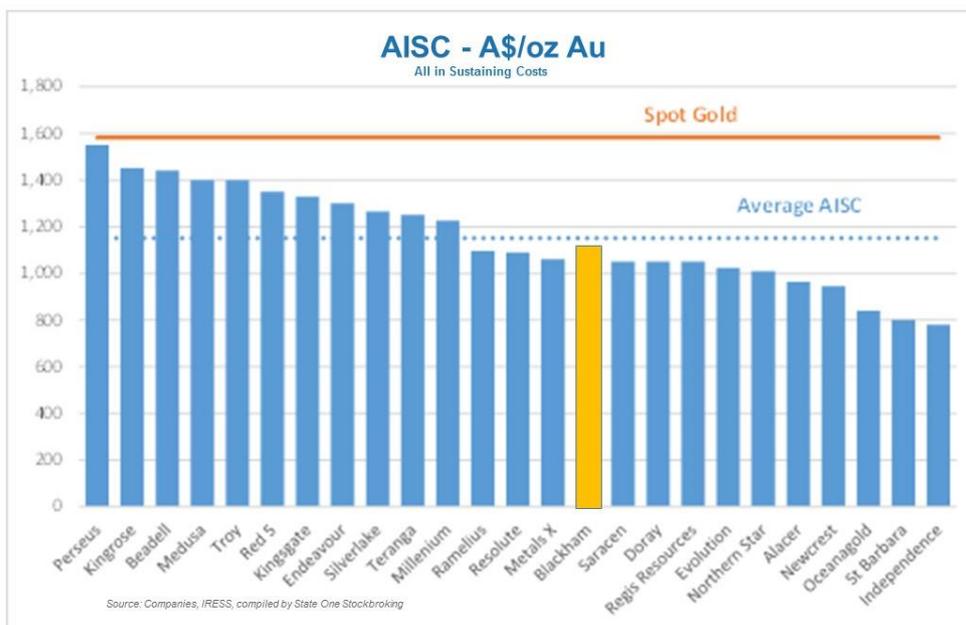
In Pit Mineral Mineralisation		6,038,000t @ 2.8g/t Au for 540,000oz contained
LOM Strip Ratio		10.5
Throughput	(t)/pa	1,272,000
Life of Mine	Years	4.75
Processing Recovery	%	86%
Recovered Gold	Oz	465,000
Average Annual Gold Production	Oz	98,000
Initial Capex/maximum cash deficiency (1)	A\$M's	28.0
Sustaining Capital Costs	A\$M's	6.3

**Table 5: Project Economics**

Gold Price Sensitivity	A\$ 1,450/oz	A\$ 1,550/oz	A\$ 1,650/oz
LOM Revenue (net of royalties (2) and refining)	639	683	727
Operating Cash Flow (6) (net of royalties (2) and refining)	143	187	231
NPV (3) (5%)	85	124	163
Payback (3)	21	14	12
IRR pre-tax (3)	65%	105%	158%
LOM C1 Cash Costs / oz (4)	920	920	920
LOM All In Sustaining Costs ('AISC) (5)	1,143	1,148	1,154

**Table 6: Gold Price Sensitivity**

- 1) Includes costs of plant refurbishment, mining and administration costs
- 2) Government royalty fixed at 2.5% plus non-state royalties of 2.8%
- 3) After royalties and capital expenditure but before tax
- 4) C1 Cash Costs include all mining, processing and general & administration costs
- 5) AISC includes C1 Cash Costs plus royalties, refining costs, sustaining capital and closure costs.
- 6) Operating Cash Flows includes Net Revenues less Operating costs less sustaining capital.



**Chart 6: Blackham Position on ASIC Cost Curve**

## Approvals

The Department of Environment and Regulation (DER) has transferred the Environmental Protection Act 1986 licence to Matilda Operations Pty Ltd, a 100% owned subsidiary of Blackham. The licence primarily allows for the processing of ore, mine dewatering extraction and discharge plus other activities required for the operation of the site.

The Department of Water (DoW) has transferred all the licences required for extraction of water for use in processing of ore and dewatering for mining purposes to Matilda Operations Pty Ltd.

With most of the approvals for the operation of the Wiluna plant now in place and current notices of intent to mine over Matilda and Williamson, there are only limited approvals required to commence operations.

Flora and Fauna surveys were recently completed for the new disturbance areas relating to the Galaxy and M10 Pits by Animal Plant Mineral Pty Ltd (APM). APM are now progressing Vegetation Clearing Permits and revising the Mining Proposals and Mine Closure Plans. In addition, Environmental Geochemistry International Pty Ltd (EGi) is progressing geochemical characterisation of the mine waste material, also as a contribution to the Mining Proposals and Mine Closure Plans.

## Financing and Execution

Blackham continues to progress its 4.7Moz Matilda Gold Project towards production by Q2 2016.

The Company signed a \$38.5 Million Funding Facility with Orion Mine Finance on 29 May 2015 (“Orion Funding Facility”) with \$8.5 million being received in May and June 2015. Subject to successful completion of the DFS, a further \$30 million will be available under the Orion Funding Facility for the development of the Matilda Gold Project.

Blackham is now focused on the completion of the DFS by January 2016 and the finalisation of its Project Implementation Plans to allow for first gold pour by Q2, 2016.

For further information on Blackham please contact:

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### **Competent Persons Statement**

*The information contained in the report that relates to Exploration Targets and Exploration Results at the Matilda Gold Project is based on information compiled or reviewed by Mr Cain Fogarty, who is a full-time employee of the Company. Mr Fogarty is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Fogarty has given consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.*

*The information contained in the report that relates to all other Mineral Resources is based on information compiled or reviewed by Mr Marcus Osiejak, who is a full-time employee of the Company. Mr Osiejak, is a Member of the Australian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Osiejak has given consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.*

*With regard to the Matilda Gold Project Mineral Resources, the Company is not aware of any new information or data that materially affects the information included in this report and that all material assumptions and parameters underpinning Mineral Resource Estimates as reported in the market announcements dated 10 June 2015 continue to apply and have not materially changed.*

*The information contained in the report that relates to ore reserves at the Matilda Gold Project is based on information compiled or reviewed by Matthew Keenan. Matthew Keenan confirmed that he has read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 JORC Edition). He is a Competent Person as defined by the JORC Code 2012 Edition, having five years' experience which is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which he is accepting responsibility. He is a Member of The Australasian Institute of Mining and Metallurgy, has reviewed the Report to which this consent statement applies and is an employee working for Entech Pty Ltd having been engaged by Blackham Resources Ltd to prepare the documentation for the Matilda Gold Project on which the Report is based, for the period ended 19 October 2015. He disclosed to the reporting company the full nature of the relationship between himself and the company, including any issue that could be perceived by investors as a conflict of interest. He verifies that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in his supporting documentation relating to Ore Reserves.*

## APPENDIX 1 – FORWARD LOOKING AND CAUTIONARY STATEMENTS

This announcement includes certain statements that may be deemed 'forward-looking statements'. All statements that refer to any future production, resources or reserves, exploration results and events or production that Blackham Resources Ltd ('Blackham' or 'the Company') expects to occur are forward-looking statements. Although the Company believes that the expectations in those forward-looking statements are based upon reasonable assumptions, such statements are not a guarantee of future performance and actual results or developments may differ materially from the outcomes. This may be due to several factors, including market prices, exploration and exploitation success, and the continued availability of capital and financing, plus general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance, and actual results or performance may differ materially from those projected in the forward-looking statements. The Company does not assume any obligation to update or revise its forward-looking statements, whether as a result of new information, future events or otherwise.

This announcement has been prepared in compliance with the current JORC Code 2012 Edition and the ASX Listing Rules. All material assumptions on which the forecast financial information is based have been included in this announcement, and are also outlined in Appendix 2.

Based on advice from relevant Competent Persons, the Company is confident that as per the definitions in the JORC Code 2012 it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

The lithological and structural controls on the mineralisation are well understood across the Mineral Inventory at Matilda, Galaxy, Golden Age, Williamson and East/West Lode. Logging of historical and recent Blackham drilling is available in conjunction with detailed mapping and extensive historical mining documentation to provide Blackham with a high degree of confidence in the geological characteristics of the potential mines that comprise the Matilda Gold Project.

Blackham has a proven track record of successfully converting existing Inferred Resources in the Mineral Inventory to Indicated Resources for the early years of the mine life. Blackham has completed a significant portion of drilling aimed at converting the Inferred Resource in the Mineral Inventory to Indicated Resources for the early years of the mine life.

The Company also notes it has a total resource of 44Mt @ 3.3g/t for 4.7Moz of which only 12% has been included in the PFS Mining Inventory. The measured and indicative resource totals 20Mt @ 3.5g/t for 2.3Moz of which only 16% is included in the PFS Reserves.

The Company believes it has a reasonable basis for making the forward-looking statements in this announcement, including with respect to any Production Targets and economic evaluation based on information contained in this announcement and in particular:

- In relation to Mineral Resources, the Company confirms that all material assumptions and technical parameters that underpin the relevant market announcement continue to apply and have not materially changed.
- Blackham has a highly experienced management team with significant experience in developing and operating Western Australian gold mines.
- The Matilda Gold Project Mining Inventory 97% is located on granted Mining Leases.
- Mr Mathew Keenan is an independent mining engineering consultant and a full time employee of Entech Pty Ltd, and has sufficient relevant experience to advise Blackham on matters relating to mine design, mine scheduling, mining methodology and mining costs for the Matilda Gold Project. Mr Keenan is satisfied that the information provided in this ASX

announcement has been determined to a PFS level of accuracy and based on the data provided by Blackham, considers that progression to a DFS can be justified for the Project.

- Blackham owns the Wiluna Gold Plant which ran up until June 2013 and has been in care and maintenance since.
- Mr Craig Bartle (Senior Metallurgy Manager) has 6 year's operating experience at the Wiluna Gold Plant.
- Messrs Steve McGhee and Mr Dave Symons, both employees of Independent Metallurgical Operations Pty Ltd, both with significant experience as Process Engineers, have sufficient experience to advise Blackham on matters relating to metallurgical testwork program and flow sheet design, operating and capital cost estimates for the Matilda Gold Project.
- Messrs Alisadir Finnie and Mark Haslam, both employees of Como Engineers Pty Ltd, both with over 20 years of experience as Process Engineers, have sufficient experience to advise Blackham on matters relating to capital cost estimates for refurbishing the Wiluna Gold Plant.
- Messrs Peter O'Bryan, Scott Campbell and John Keogh, all employees of Peter O'Bryan & Associates Pty Ltd, and with 30 years of experience as geotechnical engineers have sufficient experience to advise Blackham on matters relating to geotechnical matters relating to potential underground and open pit mines for the Matilda Gold Project.
- The Company signed \$38.5 Million Funding Facility with Orion Mine Finance on 29 May 2015. The first \$8.5 million under this facility was received in May and June. Subject to successful completion of a definitive feasibility study a further \$30 million is to be drawn down to pay for the development costs.

## APPENDIX 2

### JORC Code, 2012 Edition – Table 1 (Matilda)

#### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)



**BLACKHAM**  
Resources Limited

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Historically (pre-Blackham Resources), RC drill samples were taken at predominantly 1m intervals, or as 2m or 4m composites. Historical core sampling is at various intervals so it appears that sampling was based on geological observations at intervals determined by the logging geologist. Blackham Resources has used reverse circulation drilling to obtain 1m samples from which ~3kg samples were collected using a cone splitter connected to the rig. In places 4m composites were obtained using spear sampling, with mineralised samples to be subsequently re-assayed using the original 1m splits.</li> <li>For Blackham's RC drilling, the drill rig (and cone splitter) is always jacked up so that it is level with the earth to ensure even splitting of the sample. It is assumed that previous owners of the project had procedures in place in line with standard industry practice to ensure sample representivity.</li> <li>At the laboratory, samples &gt;3kg were 50:50 riffle split to become &lt;3kg. The &lt;3kg splits were pulverized to produce a 50g charge for fire assay. Historical assays were obtained using either aqua regia digest or fire assay, with AAS readings.</li> <li>Blackham Resources analysed samples using Quantum Analytical Services (QAS) and ALS laboratories in Perth. Analytical method was Fire Assay with a 50g charge and AAS finish.</li> <li>Approximately 10% of the drillholes used in the resource were completed by BLK.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>All Blackham drilling is RC with a face-sampling bit. Historical drilling includes RC and diamond core methods.</li> <li>Only diamond and RC were used for estimation with approximately 2% being diamond drilling.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>For Blackham drilling, chip sample recovery is visually estimated by volume for each 1m bulk sample bag, and recorded digitally in the sample database. For historical drilling, RC sample recovery data is not available, however core recovery data has been estimated by the drilling company and is available for numerous core holes.</li> <li>For Blackham drilling, sample recovery is maximized by pulling back the drill hammer and blowing the entire sample through the rod string at the end of each metre. Where composite samples are taken, the sample spear is inserted diagonally through the sample bag from top to bottom to ensure a full cross-</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>section of the sample is collected. To minimize contamination and ensure an even split, the cone splitter is cleaned with compressed air at the end of each rod, and the cyclone is cleaned every 50m and at the end of hole, and more often when wet samples are encountered. Historical practices are not known, though it is assumed similar industry-standard procedures were adopted by each operator.</p> <ul style="list-style-type: none"> <li>• For Blackham drilling, no such relationship was evaluated as sample recoveries were at 100%.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill samples have been logged for geology, alteration, mineralisation, weathering, and other features to a level of detail considered appropriate for geological and resource modelling.</li> <li>• Logging of geology and colour for example are interpretative and qualitative, whereas logging of mineral percentages is quantitative.</li> <li>• All holes were logged in full.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sampling techniques and preparation are not known for all the historical drilling. Historical core in storage is generally half core, with some quarter core remaining; it is assumed that half core was routinely analysed, with quarter core perhaps having been used for check assays or other studies.</li> <li>• Mention is made in historical reports of 1m riffle split samples for Chevron RC drilling, and of 1m and 2m or 4m composites for Agincourt drilling. For Blackham drilling, 1m samples were split using a cone splitter. 4m composite samples were collected with a spear tube where mineralisation was not anticipated. Most samples were dry; the moisture content data was logged and digitally captured. Where it proved impossible to maintain dry samples, at most three consecutive wet samples were obtained before drilling was abandoned, as per procedure.</li> <li>• RC sampling with riffle or cone splitting and spear compositing is considered standard industry practice.</li> <li>• Riffle and cone splitting is considered to be standard industry practice; each sample particle has an equal chance of entering the split chute. At the laboratory, &gt;3kg samples are split 50:50 using a riffle splitter so they can fit into a LM5 pulveriser bowl.</li> <li>• Field duplicates were collected every 20m down hole for Blackham holes. Analysis of results indicated good correlation between primary and duplicate samples. Chevron collected field duplicates at 1:20 ratio for the majority of historical RC drilling; samples showed good repeatability above 5g/t, though sample pairs show notable scatter at lower grades owing to the nugget effect. It is not clear how the historical field duplicates were taken for RC drilling.</li> <li>• Sample sizes are considered appropriate for these rock types and style of mineralisation, and are in line with standard industry practice.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>Fire assay is a total digestion method, whereas Aqua Regia is a partial digestion method. The lower detection limits of 0.01ppm or 0.02ppm Au used at various times are considered fit for purpose. For Blackham drilling, Bureau Veritas, Genalysis, ALS, and QAS completed the analyses using industry best-practice protocols. These are globally-recognized and highly-regarded companies in the industry.</li> <li>No geophysical tools were required as the assays directly measure gold mineralisation. For Blackham drilling, down-hole survey tools were checked for calibration at the start of the drilling program and every two weeks.</li> <li>Comprehensive programmes of QAQC have been adopted since the 1980's. For Blackham drilling certified reference material and blanks were submitted at 1:20 and 1:40 ratios for various campaigns and duplicate splits were submitted at 1:20 ratio with each batch of samples. Check samples are routinely submitted to an umpire lab at 1:20 ratio. Analysis of results confirms the accuracy and precision of the assay data. Chevron inserted standards, blanks and field duplicates at 1:20 ratios; the Chevron data relates to the majority of in-pit drilling at Matilda. Results show good correlation between original and repeat analyses with very few samples plotting outside acceptable ranges (+/- 20%). A recognised laboratory has been used for historical analyses (Classic Labs, Analabs, ARM).</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Blackham's significant intersections have been verified by several company personnel. A process is established where the logging and QA/QC results are verified by the more than one geologist or data manager.</li> <li>No independent or alternative verifications are available.</li> <li>Historical twin holes are not noted. Specific twin holes are not routinely drilled in Blackham campaigns however a number of BLK diamond holes have twinned historical and BLK RC drilling. Comparative studies indicate good repeatability of samples and lode widths.</li> <li>QAQC and data validation protocols are contained within Blackham's manual "BLK Assay QAQC Protocol 2013.doc". Historical procedures are not documented.</li> <li>Assay results were not adjusted.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>Blackham's drill collars are routinely surveyed using a DGPS with centimetre accuracy. All historical drill holes at Matilda appear to have been accurately surveyed.</li> <li>MGA Zone 51 South.</li> <li>Height data (Australian height datum) is collected with DGPS and converted to local relative level using a factor. Prior to DGPS surveys, relative levels are estimated based on data for nearby historical holes.</li> </ul>
<i>Data spacing</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration</i></li> </ul>	<ul style="list-style-type: none"> <li>Blackham's exploration holes are generally drilled</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>and distribution</i>	<p><i>Results.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>25m apart on east-west sections, on sections spaced 50m apart north-south.</p> <ul style="list-style-type: none"> <li>• Using Blackham's drilling and historical drilling, a spacing of approximately 12.5m (on section) by 20m (along strike) is considered adequate to establish grade and geological continuity. Areas of broader drill spacing have also been modelled and the is reflected in the resource classification.</li> <li>• Samples have been composited only where mineralisation was not anticipated. Where composite samples returned significant gold values, the 1m samples were submitted for analysis and these results were prioritized over the 4m composite values.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes were generally orientated towards the west to intersect predominantly steeply east-dipping mineralisation. However, around the historical pits optimal drill sites were not always available, so alternative orientations were used. Thus drill intercepts are not true thicknesses. This however is accounted for in the modelling.</li> <li>• Such a sampling bias is not considered to be a factor and is accounted for in the modelling.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill samples are delivered to Toll Ipec freight yard in Wiluna by Blackham personnel, where they are stored in a gated locked yard (after hours) until transported by truck to the laboratory in Perth. In Perth the samples are likewise held in a secure compound.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No such audits or reviews have been undertaken; reviews will be conducted by external resource consultants when resource estimates are updated.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li>• <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drilling is located wholly within M53/34. The tenement is owned 100% by Kimba Resources Ltd, a wholly owned subsidiary of Blackham Resources Ltd. The tenement sits within the Wiluna Native Title area, and an exploration heritage agreement is in place with the Native Title holders.</li> <li>• The tenement is in good standing and no impediments exist.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Historical artisanal mining was conducted on the M53/34 tenement and most historical workings have now been incorporated into the modern open pits. Modern exploration has been conducted on the tenement intermittently since the mid-1980's by various parties as tenure changed hands many times. This work has included mapping and rock chip sampling, geophysical surveys and extensive RAB, RC and core drilling for exploration, resource definition</li> </ul>

Criteria	JORC Code explanation	Commentary
		and grade control purposes. This exploration is considered to have been successful as it led to the eventual economic exploitation of several open pits during the late 1980's / early 1990's. The deposits remain 'open' in various locations and opportunities remain to find extensions to the known potentially economic mineralisation.
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The gold deposits are categorized as orogenic gold deposits, with similarities to most other gold deposits in the Yilgarn region. The deposits are hosted within the Matilda Domain of the Wiluna greenstone belt. Rocks in the Matilda Domain have experienced Amphibolite-grade regional metamorphism. At the location of this drilling, the Matilda Domain is comprised of a fairly monotonous sequence of highly sheared basalts. Gold mineralisation is related to early deformation events, and it appears the lodes have also been disrupted by later shearing / faulting on the nearby Erawalla Fault, as well as later cross-faults.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results are not material to this report because this resource estimate is based on all available historical and modern RC and core drilling data.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole intersections are reported as length-weighted averages, above a 0.6g/t cut-off, using a maximum 2m contiguous internal dilution.</li> <li>• High-grade internal zones are reported at a 5g/t envelope, e.g. MARCO183 contains 8m @ 5.844g/t from 46m including 1m @ 18.36g/t.</li> <li>• No metal equivalent grades are reported because only Au is of economic interest.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>• Various lode geometries are observed at Matilda, including east-dipping, west-dipping and flat-lying geometries. Generally the lodes strike north-northeast. Historical drilling was oriented vertically or at -60° west, the latter being close to optimal for the predominant steeply-east dipping orientation. Blackham's drill holes are not always drilled at optimal drill angles, ie perpendicular to mineralisation, owing to these various geometries, limitations of the rig to drilling &lt;50° angled holes, and difficulty in positioning the rig close to remnant mineralisation around open pits.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• See body of this report.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Full reporting of the historical drill hole database of over 40,000 holes is not feasible. A full list of results from the current drilling program is included with the report.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Other exploration tests are not the subject of this report.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Follow-up resource definition drilling is likely, as mineralisation is interpreted to remain open in various directions.</li> <li>• Diagrams are provided in the body of this report.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>• <i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i></li> <li>• <i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Data is validated upon upload into the Datashed database such that only codes within the various code libraries are accepted. Assay data is loaded from digital files.</li> <li>• Data is subsequently validated using Datashed validation macros, and then in Micromine and Surpac using validation macros. Data is checked for holes that</li> </ul>

Criteria	JORC Code explanation	Commentary
		are missing data, intervals that are missing data, missing intervals, overlapping intervals, data beyond end-of-hole, holes missing collar co-ordinates, and holes with duplicate collar co-ordinates.
<i>Site visits</i>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The site has been visited by the Competent Person, and no problems were identified.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The deposit has previously been mined, which has confirmed the geological interpretation.</li> <li>• Geological data used includes lithology, mineral percentages (such as quartz veining and sulphides) to identify lode positions, and weathering codes and rock colour to model the weathering domains. Gold mineralisation is known to relate to quartz and sulphide content. Weathering codes are assumed to have been logged consistently by various geologists.</li> <li>• A high degree of confidence is placed on the geological model, owing to the tight drill spacing. Any alternative model interpretations are unlikely to have a significant impact on the grade and tonnes.</li> <li>• At Matilda, the host rocks are a fairly monotonous sequence of basalts, thus lithology is not the primary control on the location of mineralisation. Mineral percentages (such as quartz veining and sulphides) are used as a proxy for interpreting lode positions, as are weathering codes to model the weathering domains.</li> <li>• Significant mineralisation is hosted within moderately north-plunging shoots, which may represent boudinaged older tabular lodes. Thus lodes are continuous down-plunge, with lesser up-dip continuity.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>• <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Matilda deposit is comprised of a number of domains; M1, M2, M3, M4, M5, M8 and Coles Find. These combined zones extend almost 2.5km along a strike of 330° and cover a width of approximately 1km. The deepest vertical interval is 395m at the M1 prospect.</li> </ul>
<i>Estimation and modeling techniques</i>	<ul style="list-style-type: none"> <li>• <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average Au block grades within all domains. Surpac software was used for the estimations. Three dimensional mineralised wireframes (interpreted by BLK) were used to domain the Au data. Sample data was composited to 1m down hole lengths using the best fit method.</li> <li>• If the intervals did not have assays because they were deemed un-mineralised and therefore not tested they others were assigned waste values; only those considered to be mineralised were excluded.</li> <li>• The influence of extreme grade values was addressed by reducing high outlier values by applying top-cuts to the data. These top-cut values were determined through statistical analysis (histograms, log probability plots, coefficients of variation and summary multi-</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modeling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<p>variate and bi-variate statistics). The maximum distance of extrapolation from data points is in the order of 120m at M1, M3, and M4. That is blocks within each model at the extremity of the resource wireframes are estimated using sample points up to 120m away.</p> <ul style="list-style-type: none"> <li>• Down hole and directional variograms were modeled using normal score transformations of the skewed data sets. Nuggets were moderate to high. Geostatistical analysis was confined to the main lodes at each prospect with parameters applied to adjacent lodes, with search ellipse parameters adjusted to match the individual lode geometry.</li> <li>• Only incomplete historical production figures are available at the Matilda prospects. BLK did not reconcile the current in-pit resource to the historical figures as not all grade control data was available, and the current interpretations may not match the mined lodes. The production figures at the time mining operations were halted are not known. This estimation is comparable to that completed by Runge in 2013/14 and any significant differences have been accounted for through depletions, change in interpretation and additional drilling information.</li> <li>• BLK has not made assumptions regarding recovery of by-products from the mining and processing of the Matilda Au resource.</li> <li>• No estimation of deleterious elements was carried out. Only Au was interpolated into the block model.</li> <li>• The parent block dimensions used were 10m NS by 2.5m EW by 5m vertical with sub-cells of 2.5m by 0.625m by 1.25m. The parent block size was selected on the basis of being approximately 50% of the average drill hole spacing immediately below the existing pits. An orientated 'ellipsoid' search was used to select data and was based on parameters taken from the variography or the observed lode geometry. Three passes were used for each domain at each prospect. In general, the first pass used a range of between 20m to 30m, with a minimum of 6 to 10 samples, a minimum of 3 drillholes were required. For the second pass, the range was extended to between 50m and 60m, with a minimum of 6 samples, a minimum of 2 drillholes were required. For the final pass, the range was extended to 120m, with a minimum of 2 samples. A maximum of 32 samples was used for the first and second passes and 12 for the final pass. The first 3 passes filled all blocks except for those lodes based on one drill hole intersection in which case they were given the average grade of the composites. The relatively short search ranges for the first pass were applied in an attempt to limit grade smoothing within the very close (less than 20m) spaced drill holes.</li> <li>• No assumptions were made on selective mining units.</li> <li>• Only Au assay data was available, therefore correlation analysis was not carried out.</li> <li>• The deposit mineralisation was constrained by</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>wireframes constructed using a 0.5g/t Au cut-off grade. A minimum intercept of 2m was required with a maximum of 2m of internal dilution. The wireframes were applied as hard boundaries in the estimate.</p> <ul style="list-style-type: none"> <li>• Statistical analysis was carried out on data from each prospect. The high coefficient of variation within some main lodes, and the scattering of high grade outliers observed on the histograms, suggested that high grade cuts were required if linear grade interpolation was to be carried out.</li> <li>• A three step process was used to validate the model. A qualitative assessment was completed by slicing sections through the block model in positions coincident with drilling. A quantitative assessment of the estimate was completed by comparing the average Au grades of the composite file input against the Au block model output for all the resource objects. A trend analysis was completed by comparing the interpolated blocks to the sample composite data within the main lodes. This analysis was completed for northings and elevations across the main lodes at each deposit. Validation plots showed good correlation between the composite grades and the block model grades.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The nominal cut-off grade of 0.5g/t appears to be a natural cut-off between mineralised veins and host rock as determined from analysis of log probability plots of all samples at each prospect. This cut-off was used to define the mineralised wireframes. The Mineral Resource has been reported at a 0.6g/t Au cut-off above the 900mRL (which occurs on average at a depth of 200m below the topographic surface) and at a 2g/t cut-off below the 900mRL for M1, M2, M3, M4 and M5. M6, M8, M10 and Coles Find were reported at a 0.75g/t cut-off above the 900mRL as the estimation for these areas have remained unchanged. These values are based on BLK assumptions about economic cut-off grades for open pit and underground mining. BLK has access to previous mining reports from across all prospects at the Matilda deposit.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>• <i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an</i></li> </ul>	<ul style="list-style-type: none"> <li>• Blackham believes that a significant portion of the Matilda Deposit defined Mineral Resource has reasonable prospects for eventual economic extraction by medium to large-scale open pit mining methods, taking into account current mining costs and metal prices and allowing for potential economic variations. Historical economic mining of similar deposits has occurred in the area.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>explanation of the basis of the mining assumptions made.</i>	
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>The deposit has previously been mined and successfully processed for gold extraction. Blackham's metallurgical testwork has shown the resource could be economically treated using standard gravity concentration / carbon-in-leach cyanidation technology.</li> <li>An overall recovery, weighted by in-pit tonnes of 87% was obtained for oxide+transitional+fresh material from the most recent metallurgical test-work.</li> <li>Lower recoveries have been noted with increasing depth.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>Blackham Resources has submitted a detailed Mine Closure Plan to the Department of Mines and Petroleum. This document will be finalized during the project feasibility stage.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>Blackham has obtained bulk density results for 365 core samples including a selection of oxide, transitional and fresh material types using the 'weight in air vs weight in water' method. Results reported are comparable to those used in historical resource models. Ammtec completed bulk density test work on oxide samples for Eon Metals and results apparently reconciled well during the 6 years of mine operation. The analytical method is not known. Eon Metals did not record measurements for fresh and transitional material because these material types were not of economic interest to Eon.</li> <li>Values for transitional and fresh material were adopted from those used by the adjacent Wiluna Mines exploration department.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li><i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and</i></li> </ul>	<ul style="list-style-type: none"> <li>The various prospects at the Matilda deposit have been classified as Measured, Indicated and Inferred Mineral Resource. The Measured portion of the resource was defined where the drill spacing was predominantly at 10m by 10m immediately below the existing pits, and continuity of mineralisation was robust. The Indicated portion of the resource was defined where the drill spacing was predominantly at</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>metal values, quality, quantity and distribution of the data).</i></p> <ul style="list-style-type: none"> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<p>25m by 25m and in some areas up to 40m by 40m, and continuity of mineralisation was strong. The Inferred Resource included the down depth lode extensions or minor lodes defined by sparse drilling.</p> <ul style="list-style-type: none"> <li>• Historical documents (including annual reports) provide detailed information on drilling and mining at the various prospects. A large proportion of the digital input data has been transcribed from historical written logs and validation checks have confirmed the accuracy of this transcription. The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The continuity of geology is well understood as existing pits and historical mining reports provide substantial information on mineralisation controls and lode geometry. Recent BLK infill drilling has supported the interpretations. Validation of the block model shows good correlation of the input data to the estimated grades.</li> <li>• The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• External audits have been completed and a comparison has been made with the previous resource estimate completed by RPM.</li> </ul>
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The confidence in the Matilda Mineral Resource estimate has not been quantified as such however in terms of qualitative assessment the lode geometry has been verified through direct observation of existing open pit walls and from historical mining reports. Current targeted drilling has confirmed the down dip extensions of the main lodes across the deposit. BLK has a good understanding of the geology and mineralisation controls gained through study of all historical mining data.</li> <li>• The Mineral Resource statement relates to global estimates of tonnes and grade.</li> <li>• The deposit is not currently being mined. Historical production figures supplied to Blackham relate to individual prospects at various stages of the mine life and no final production figures were available. Reconciliation of the current Mineral resource with historical production is not possible.</li> </ul>

## JORC Code, 2012 Edition – Table 1 (Wiluna)

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<p><i>Sampling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>• This is a portion of a large drilling database compiled since the 1930’s by various project owners. Only the drilling results contained in this document are considered in this table, as it is impractical to comment on the entire database. Golden Age has been mainly core drilled from underground, though some surface RAB and RC drilling has tested the shallow portions of the deposit. Drilling data contained in this report includes RC and diamond core data. Drilling data is more complete for holes drilled since the early 2000’s. Sundry data on sampling quality is not available and not evaluated in earlier drilling. Blackham Resources has used reverse circulation drilling to obtain 1m samples from which ~3kg samples were collected using a cone splitter connected to the rig.</li> <li>• For Blackham’s RC drilling, the drill rig (and cone splitter) is always jacked up so that it is level with the earth to ensure even splitting of the sample. It is assumed that previous owners of the project had procedures in place in line with standard industry practice to ensure sample representivity.</li> <li>• Historically, RC samples were composited in the field on 2m or 6m composites, with high-grade samples subsequently re-sampled on 1m intervals. Composited samples were spear-split, and / or reduced in size in the field using a riffle splitter to ensure sample representivity. For Blackham drilling, 4m composites were collected in the field, with 1m splits to be assayed where mineralisation is encountered. At the laboratory, samples &gt;3kg were 50:50 riffle split to become &lt;3kg. The &lt;3kg splits were pulverized to produce a 50g charge for fire assay.</li> <li>• Gold analyses were obtained using industry standard methods; split samples were pulverized in an LM5 bowl to produce a 50g charge for assay by Fire Assay or Aqua Regia with AAS finish at the Wiluna Mine site laboratory. Blackham Resources analysed samples using Quantum Analytical Services (QAS) laboratories in Perth. Analytical method was Fire Assay with a 50g charge and AAS finish (P-FA6).</li> </ul>
<p><i>Drilling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is orientated and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Historical drilling data contained in this report includes RC and DD core samples. RC sampling utilized a face-sampling hammer of 4.5” or 5.5” diameter, and DD sampling utilized NQ2 half core samples. It is unknown if core was orientated, though it is not material to this report. All Blackham drilling is RC with a face-sampling bit.</li> </ul>
<p><i>Drill sample</i></p>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results</i></li> </ul>	<ul style="list-style-type: none"> <li>• For Blackham drilling, chip sample recovery is visually estimated by volume for each 1m bulk</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>recovery</i>	<p><i>assessed.</i></p> <ul style="list-style-type: none"> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<p>sample bag, and recorded digitally in the sample database. For historical drilling, recovery data for drill holes contained in this report has not been located or assessed, owing to incomplete data records. Database compilation is ongoing.</p> <ul style="list-style-type: none"> <li>• For Blackham drilling, sample recovery is maximized by pulling back the drill hammer and blowing the entire sample through the rod string at the end of each metre. Where composite samples are taken, the sample spear is inserted diagonally through the sample bag from top to bottom to ensure a full cross-section of the sample is collected. To minimize contamination and ensure an even split, the cone splitter is cleaned with compressed air at the end of each rod, and the cyclone is cleaned every 50m and at the end of hole, and more often when wet samples are encountered. Historical practices are not known, though it is assumed similar industry-standard procedures were adopted by each operator. For historical drilling with dry samples it is unknown what methods were used to ensure sample recovery, though it is assumed that industry-standard protocols were used to maximize the representative nature of the samples, including dust-suppression and rod pull-back after each drilled interval. For wet samples, it is noted these were collected in polyweave bags to allow excess water to escape; this is standard practice though can lead to biased loss of sample material into the suspended fine sample fraction.</li> </ul> <p>Some intervals logged as ‘stope’ were assayed, presumably this is back-fill material and would be excluded from detailed investigation of these prospects. The presence of these intervals does not materially affect assessment of the prospects at this stage.</p> <ul style="list-style-type: none"> <li>• For Blackham drilling, no such relationship was evaluated as sample recoveries were generally very good. For historical drilling no relationship was investigated as recovery data is not available.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples have been routinely logged for geology, including lithology, colour, oxidation, veining and mineralisation content. This level of detail is considered appropriate for exploration drilling.</li> <li>• Logging of geology and colour for example are interpretative and qualitative, whereas logging of mineral percentages is quantitative.</li> <li>• Holes were logged entirely. Geology data has not yet been located for some holes, database compilation is on-going.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality</i></li> </ul>	<ul style="list-style-type: none"> <li>• For core samples, it is assumed that sawn half-core was routinely sampled. Holes have been selectively sampled (visibly barren zones not sampled, though some quartz vein intervals have been left un-sampled), with a minimum sample width of 0.4m and maximum of 1.4m, though typically 1m intervals</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>and appropriateness of the sample preparation technique.</i></p> <ul style="list-style-type: none"> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>were selected.</p> <ul style="list-style-type: none"> <li>• Historically, RC and RAB samples were riffle split for dry samples; wet samples were collected in polyweave bags and speared. RC and RAB samples were initially composited on 2m, 4m or 6m intervals. Composites grading &gt;0.1g/t were subsequently assayed on 1m intervals. For Blackham drilling, 1m samples were split using a cone splitter. 4m composite samples were collected with a spear tube where mineralisation was not anticipated. Most samples were dry; the moisture content data was logged and digitally captured. Where it proved impossible to maintain dry samples, at most three consecutive wet samples were obtained before drilling was abandoned, as per procedure.</li> <li>• Riffle splitting and half-core splitting are industry-standard techniques and considered to be appropriate. Note comments above about samples through 'stope' intervals; these samples don't represent the pre-mined grade in localized areas.</li> <li>• For historical drilling, field duplicates, blank samples and certified reference standards were collected and inserted from at least the early 2000's. Investigation revealed sufficient quality control performance. No field duplicate data has been located or evaluated in earlier drilling. Field duplicates were collected every 20m down hole for Blackham holes. Analysis of results indicated good correlation between primary and duplicate samples.</li> <li>• Sample sizes are considered appropriate for these rock types and style of mineralisation, and are in line with standard industry practice.</li> </ul>
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Fire assay is considered a total digestion technique, whereas aqua regia is a partial digestion. Both techniques are considered appropriate for analysis of exploration samples.</li> <li>• No geophysical tools were used to obtain analyses.</li> <li>• Field duplicates, blank samples and certified reference standards were collected and inserted from at least the early 2000's. Results generally fall within acceptable levels. However, for holes drilled prior to this no QAQC data has been located or evaluated. Some intervals logged as 'stope' were also assayed, presumably this is back-fill material and would be excluded from detailed investigation of these prospects. The presence of these intervals does not materially affect assessment of the prospects at this stage, although if anything prospectivity is enhanced as pre-mining metal tenor was greater than the drilling results indicate in stoped areas. For Blackham drilling certified reference material and blanks were submitted at 1:20 and 1:40 ratios for various campaigns and duplicate splits were submitted at 1:20 ratio with each batch of samples. Check samples are routinely submitted to an umpire lab at 1:20 ratio. Analysis of results confirms the accuracy and precision of the</li> </ul>

Criteria	JORC Code explanation	Commentary
		assay data.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Blackham’s significant intercepts have been verified by several company personnel. For historical results, significant intercepts can’t be independently verified. However, database validation and cleaning has been done to ensure the latest assay set appears i.e. where intervals have been sub-split the newest assays are given priority.</li> <li>• The use of twin holes is not noted, as this is not routinely required. However, drilling at various orientations at a single prospect is common, and this helps to correctly model the mineralisation orientation.</li> <li>• Data is stored in Datashed SQL database. Internal Datashed validations and validations upon importing into Micromine were completed, as were checks on data location, logging and assay data completeness and down-hole survey information. QAQC and data validation protocols are contained within Blackham’s manual “BLK Assay QAQC Protocol 2013.doc”. Historical procedures have not been sighted.</li> <li>• Assay data has not been adjusted.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All historical holes appear to have been accurately surveyed to centimeter accuracy. Blackham holes reported herein have not yet been DGPS surveyed, though collar positions have been GPS located to within several metres accuracy.</li> <li>• Grid systems used in this report are Wil10 local mine grid and GDA 94 Zone 51 S. Drilling collars were originally surveyed in either Mine Grid Wiluna 10 or AMG, and converted in Datashed to MGA grid.</li> <li>• An accurate topographical model covering the mine site has been obtained, drill collar surveys are closely aligned with this. Away from the mine infrastructure, drill hole collar surveys provide adequate topographical control.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Each of the prospects mentioned in this report has received sufficient historical drilling to allow structural orientation and lode thicknesses to be confidently interpreted. Drill spacing is general 50m x 25m or better, with holes oriented perpendicular to the strike of quartz reefs. Mineral resources and reserves are not the subject of this report.</li> <li>• For core samples, typically 1m intervals were sampled though 3m composites are noted in some barren zones. Historical RC and RAB samples were initially composited on 2m, 4m or 6m intervals. Composites grading &gt;0.1g/t were subsequently assayed on 1m intervals. For Blackham drilling, samples have been composited, the 1m samples will be submitted for analysis and these results were prioritized over the 4m composite values.</li> </ul>
<i>Orientation of data in relation to geological</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this</i></li> </ul>	<ul style="list-style-type: none"> <li>• In the historical data, no such bias is noted or believed to be a material factor. Potentially diamond half-core samples may show such bias to a minor</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>structure</i>	<p><i>is known, considering the deposit type.</i></p> <ul style="list-style-type: none"> <li><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<p>degree; holes are orientated perpendicular to strike to mitigate any such bias. For Blackham drilling, the RC technique utilizes the entire 1m sample so significant bias is unlikely.</p>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>It is not known what measures were taken historically. For Blackham drilling, samples are delivered to Toll Ipec freight yard in Wiluna by Blackham personnel, where they are stored in a gated locked yard (after hours) until transported by truck to the laboratory in Perth. In Perth the samples are likewise held in a secure compound.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>For Blackham drilling, data has been validated in Datashed and upon import into Micromine. QAQC data has been evaluated and found to be satisfactory. Historical assay techniques and data have not been reviewed in detail owing to the preliminary stage of exploration work.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>All drill holes mentioned in this report are situated on granted mining licenses held 100% by Matilda Operations Pty Ltd, a fully-owned of Blackham Resources Ltd.</li> <li>Tenements are in good standing and no impediments exist.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Historical artisanal mining was conducted on the tenements. Modern exploration and mining has been conducted on the Brothers, Golden Age and Republic reefs since the early-1990's. This exploration is considered to have been successful as it led to the definition of JORC-compliant mineral resources and profitable open pit and underground mines. The deposits remain 'open' in various locations and opportunities remain to find extensions to the known potentially economic mineralisation. Deeper portions of Republic and Brothers reefs more than 70m below surface have been poorly tested, with the intercepts reported herein coming in some cases from holes designed to target other resource areas.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The gold deposits are categorized as orogenic gold deposits, with similarities to many other gold deposits in the Yilgarn region. The deposits are hosted within the Wiluna Domain of the Wiluna</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Greenstone Belt. Rocks in the Wiluna Domain have experienced greenschist-facies regional metamorphism and brittle deformation. The Wiluna Domain is comprised of a fairly monotonous sequence of foliated basalts and high-magnesian basalts, with intercalated felsic intrusions, lamprophyre dykes, metasediments, and dolerites. Gold mineralisation is related to quartz vein emplacement, typically along stratigraphic boundaries, and the lodes have also been disrupted by later cross-faults.</p>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results are not material to this report because this resource estimate is based on all available historical and modern RC and core drilling data.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Assay intervals reported are length-weighted averages. Intervals are reported using a 1g/t lower cut-off and maximum 2m internal contiguous dilution.</li> <li>• No metal equivalent grades are reported as Au is the only metal of economic interest.</li> </ul>
<b>Relationship between mineralisation widths and</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Holes were often drilled obliquely to mineralisation owing to the difficulty in finding optimum drilling locations around the mine infrastructure, particularly at Golden Age, or in other cases the reefs were not the intended target such that drilling angles were not optimal. Holes targeting the reefs</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Intercept lengths</i>	<ul style="list-style-type: none"> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	were generally drilled perpendicular to strike and dip. Accordingly, true widths are approximately 80% of down-hole widths.
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Please see body of this report for diagrams and tables.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Selected intervals have been reported owing to impracticality of reporting the large drilling database.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>Not material to this report.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Step-out drilling is planned to locate high-grade extensions to shoots at depth and along strike of historical drilling intercepts. Please see body of the report for locations of the targets identified for high-priority drilling.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>All data has been uploaded using Datashed which incorporates a series of internal checks.</li> <li>The Wiluna dataset has been validated in Datashed and Surpac using internal validation macros and checks. Holes have been checked and corrected where necessary for: <ul style="list-style-type: none"> <li>Intervals beyond EOH depth</li> <li>Overlapping intervals</li> <li>Missing intervals</li> <li>Holes with duplicate collar co-ordinates (i.e.</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>same hole with different names)</p> <ul style="list-style-type: none"> <li>• Missing dip / azimuth</li> <li>• Holes missing assays</li> <li>• Holes missing geology</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A site visit has been undertaken and no concerns or issues were discovered.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The interpretation of the mineralisation was carried out using a methodical approach to ensure continuity of the geology and estimated mineral resource using Surpac software. The confidence in the geology and the associated mineralisation is high.</li> <li>• All available geological data was used in the interpretation including mapping, drilling, oxidation surfaces and interpretations of high grade ore shoots. Only diamond and reverse circulation drilling samples were used in the final estimate however all available grade control data was used in the geological assessment.</li> <li>• No alternate interpretations have been completed. The current interpretation follows similar methodology to that used historically.</li> <li>• Drill logging has been used to constrain the 3D wireframes.</li> <li>• Gold mineralisation is predominantly associated with second to third order north and northeast trending brittle to brittle-ductile dextral strike-slip faults, localised at dilational bends or jogs along faults, at fault intersections, horsetail splays and in subsidiary overstepping faults.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>• <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Strike length = ~ 3700 m</li> <li>• Width (total of combined parallel lodes) = ~ 800 m</li> <li>• Depth (from surface) = ~ 0 to 1000 m</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li>• <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding</i></li> </ul>	<ul style="list-style-type: none"> <li>• The sample domains were flagged into an Access database from a validated wireframe.</li> <li>• A composites string-file was then created in Surpac with a 1.0 m composite length and a minimum percentage of sample to include at 30%.</li> <li>• Only Reverse Circulation (RC) and Diamond Drilling were used in the estimate.</li> <li>• Resource estimation for the Wiluna mineralisation was completed using Ordinary Kriging for Gold (Au) and Inverse Distance Squared for Sulphur (S). Blockmodel field coding was used to constrain the estimate.</li> <li>• Soft boundaries were utilised between the oxidation surfaces.</li> <li>• Only samples contained within each individual ore wireframe were used for the estimate of that lode.</li> <li>• A number of previous resource estimates and studies</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>recovery of by-products.</i></p> <ul style="list-style-type: none"> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<p>have been undertaken and were reviewed to assist in the development of this resource estimate.</p> <ul style="list-style-type: none"> <li>• The modelled wireframes were used to create a blockmodel with a user block size of 2mE by 10mN by 10mRL. The model used variable sub-blocking to 0.5mE by 2.5mN by 2.5mRL. The Block size corresponds to around half of the nominal drillhole spacing for all the main lodes.</li> <li>• Specifically for the Golden Age narrow vein a user block size of 2mE by 2mN by 2mRL. The model used variable sub-blocking to 0.5mE by 0.5mN by 0.5mRL. The smaller block sizes are based on the narrow nature of the Golden Age ore body and the corresponding data density.</li> <li>• The search ellipses used were based on the ranges of continuity observed in the variograms along with considerations of the drillhole spacing and lode geometry. The search ellipse was rotated to best reflect the lode geometry and the geology as seen in the drilling and as described in the logging. This geometry was checked to ensure that it was also supported by the variogram analysis.</li> <li>• Ordinary kriging parameters were also checked against those used in previous resource estimates and variography studies. No significant differences were discovered.</li> <li>• Three search passes were used to populate blocks using search ellipse distances based on ranges observed in the variograms. Typically the first pass was no more than 30 m and a second pass no more than 60 m. Each pass incorporated a different set of sample selection criteria to ensure blocks were filled with an appropriate level of statistical confidence.</li> <li>• For the first two passes at least 3 individual drillholes were required to complete the estimate.</li> <li>• Topcuts were determined from statistical analysis. A number of factors were taken into consideration when determining the top-cuts including: <ul style="list-style-type: none"> <li>○ The disintegration point of the data on the probability plots;</li> <li>○ Having a coefficient of variance (CV) under 2.0; and</li> <li>○ Reviewing the model (block) grades against the composites.</li> </ul> </li> <li>• The estimate was validated using a number of techniques including but not limited to: <ul style="list-style-type: none"> <li>○ A visual comparison of block grade estimates and the drill hole data;</li> <li>○ A comparison of the composite and estimated block grades;</li> <li>○ A comparison of the estimated block grades for the ordinary kriged model against an inverse distance model.</li> <li>○ A comparison of the estimated block grades for ordinary kriged models using different cut-off grades for the composites.</li> <li>○ A comparison of the estimated block grades</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		against the composite grades along northings.
<i>Moisture</i>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages are estimated on a dry basis.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The nominal cut-off grade of applied for the individual resource areas appears to be a natural cut-off between mineralised veins and host rock as determined from analysis of log probability plots of all samples at each prospect. Mineralisation boundaries are typically sharp in that there is generally a significant order of magnitude (2 to 4 fold) increase in gold values between ore and waste zones.</li> <li>A global reporting cut-off grade of 4.00g/t was applied to the Golden Age resource. This is based on the understanding that a variety of underground mining techniques (including but not exclusive to) air-legging may be used.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>No mining factors or assumptions have been applied although it is envisaged that the resource has been created on the basis of an underground mining method.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Wiluna ores are typically extremely refractory, with most gold occurring in either solid solution or as submicroscopic particles within fine-grained sulphides.</li> <li>Golden Age mineralisation is free milling/oxide gold; this is located throughout the quartz but appears more concentrated where there are stylolites. There is commonly a strong base metals signature with galena, chalcopyrite, sphalerite and pyrite being common. These areas also include higher grades but the gold is not associated with the sulphides as with the refractory ore. The mineralization is mainly in the quartz reef but there are some splays of quartz, especially to the footwall which can contain gold.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of</li> </ul>	<ul style="list-style-type: none"> <li>A full underground feasibility study is yet to be completed.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></p>	
<p><b>Bulk density</b></p>	<ul style="list-style-type: none"> <li>• <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li>• <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Bulk densities were assigned as 1.80 t/m<sup>3</sup> for oxide, 2.40 t/m<sup>3</sup> for transitional and 2.80 t/m<sup>3</sup></li> <li>• A total of 16,206 bulk density determinations have been collected by extensive sampling of diamond drill core in Calais – Henry 5, East Lode North and Calvert areas throughout the orebody and in wallrock adjacent to the mineralisation. All sections of the underground resource are in primary rock, and Bulk Density values are relatively uniform throughout.</li> <li>• Bulk Density determinations were completed by Apex staff for every assayed interval since the commencement of Apex’s involvement with the project to the end of 2008. In addition, in areas where Apex bulk density determinations are considered too sparse, pre-Apex diamond core has been used for determinations.</li> </ul>
<p><b>Classification</b></p>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person’s view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A range of criteria were considered when addressing the suitability of the classification boundaries to the resource estimate. <ul style="list-style-type: none"> <li>○ Geological continuity and volume models;</li> <li>○ Drill spacing and available mining information;</li> <li>○ Modelling technique</li> <li>○ Estimation properties including search strategy, number of informing composites, average distance of composites from blocks, number of drillholes used and kriging quality parameters.</li> </ul> </li> <li>• The classification for this model was predominantly based on the estimation pass. With the first pass relating to an indicated resource and the second pass being inferred.</li> <li>• The classification of the blocks was also visually checked and adjusted to remove any “spotted dog” effects. No measured resources were calculated.</li> </ul>
<p><b>Audits or reviews</b></p>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Audits have been undertaken on the resource estimates completed by Apex Minerals in 2012. No major issues were discovered and recommendations made from those audits have been assessed and included where required in subsequent estimates.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>No specific review or audit has been under on the updated Golden Age Resource estimate.</li> </ul>
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>This resource estimate is intended an underground mining assessment and reports global estimates.</li> </ul>

## Section 4 Estimation and Reporting of Ore Reserves (Matilda and Wiluna)

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	<ul style="list-style-type: none"> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource used as the basis of this Ore Reserve was released to market; <ul style="list-style-type: none"> <li>Galaxy and Golden Age both announced on the 20th November 2014</li> <li>Wiluna East/West Lode 14th December 2014</li> <li>Matilda 20th October 2015</li> <li>Williamson 9th May 2013</li> </ul> </li> <li>Mineral Resources have not been reported additional to the Ore Reserves.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person previously worked at the Wiluna Gold mine and is familiar with the underground operations, the Galaxy area and the Wiluna site infrastructure including the processing plant.</li> <li>The Competent Person has not visited the Matilda area, however the Competent Person is comfortable relying on reports from other independent consultants and detailed site surveys in determining the viability of the Ore Reserve.</li> </ul>
<i>Study status</i>	<ul style="list-style-type: none"> <li>The type and level of study</li> </ul>	<ul style="list-style-type: none"> <li>A Pre-Feasibility Study has been completed for all</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>undertaken to enable Mineral Resources to be converted to Ore Reserves.</i></p> <ul style="list-style-type: none"> <li><i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i></li> </ul>	<p>material being converted from Mineral Resource to Ore Reserve.</p> <ul style="list-style-type: none"> <li>Modifying factors accurate to the study level have been applied. Detailed modelling indicates that the resulting mine plan is technically achievable and economically viable.</li> </ul>
<p><b>Cut-off parameters</b></p>	<ul style="list-style-type: none"> <li><i>The basis of the cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Cut-off grade parameters were determined based on previous scoping study work and historical costs from the Wiluna mine.</li> </ul>
<p><b>Mining factors or assumptions</b></p>	<ul style="list-style-type: none"> <li><i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></li> <li><i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></li> <li><i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i></li> <li><i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></li> <li><i>The mining dilution factors used.</i></li> <li><i>The mining recovery factors used.</i></li> <li><i>Any minimum mining widths used.</i></li> <li><i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></li> <li><i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	<ul style="list-style-type: none"> <li>Detailed mine designs were carried out on all ore sources and used as the basis for the Ore Reserve estimate.</li> <li>Conventional mining methods were chosen. Open cut operations are planned around using 200 t-class excavators and 140 t dump trucks for waste excavation where working areas allowed, and 120 t-class excavators with 140 t dump trucks for ore excavation and in deeper parts of the pits where working room is restricted. The top 40 m of mining of the Williamson pit was assumed to be carried out using 300 t excavators and 140 t trucks based on the design and expected material characteristics. Pit designs for final benches in the M1, M10, Galaxy and Williamson pits assumed the use of 40 t articulated trucks. All material excluding existing in-pit backfill was assumed to require drilling and blasting using ANFO-type explosives.</li> <li>Underground production at the East-West and Golden Age underground mines will be predominantly from top-down mechanised longhole open stoping with in-situ pillars retained for stability. Diesel powered trucks and loaders will be used for materials handling. Diesel-electric jumbo drill rigs will be used for development and ground support installation.</li> <li>The mining methods chosen are well-known and widely used in the local mining industry and production rates and costing can be predicted with a suitable degree of accuracy. Suitable access exists for all mines, Allowance was made for earthworks and infrastructure requirements including haul road construction and clearing for site facilities and mining areas.</li> <li>Independent consultants prepared a geotechnical analysis to a suitable level of detail. This forms the basis of pit wall design criteria, underground stope sizes and pillar designs, underground mining factors and underground development design and support assumptions.</li> <li>Allowances were made for grade control activities in both underground and open pit mines.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Only the Indicated portion of the Mineral Resource was used to estimate the Ore Reserve. All Inferred material has had grade set to waste. The Ore Reserve is technically and economically viable without the inclusion of Inferred Mineral Resource material.</li> <li>• Underground stopes were designed inclusive of minimum mining width plus dilution 'skins'. For East-West this comprised a minimum planned width of 2 m plus 0.25 m dilution skin on both the hangingwall and footwall, for a total minimum stope void width of 2.5 m at 20-25 m sub-level intervals. For Golden Age, this comprised a minimum planned width of 1 m plus 0.1 m dilution skin on both the hangingwall and footwall, for a total minimum stope void width of 1.2 m at 17 m sub-level intervals. Stopes wider than 1.2 m had an additional 10% dilution applied. These factors were based on historical experience, geotechnical advice and industry standards for the mining method based on the sub-level interval.</li> <li>• Open pit mining blocks were diluted by 10% based on industry experience.</li> <li>• Mining recovery of 95% was assumed for the stopes at the East-West and Golden Age underground operations. East-West ore development had an assumed 100% mining recovery, based on historical experience and industry standards. The Golden Age ore development had a tonnage recovery of 60% and a metal recovery of 80% applied, on the basis of undertaking a selective single-firing rescue method of development.</li> <li>• Open pit mining recovery was assumed at 95% based on industry experience.</li> <li>• Most of the infrastructure required for the operations is already in place at the Wiluna operation, including a processing plant and associated infrastructure, camp, airstrip, offices, power station and power reticulation, borefields and coreyards. Allowance has been made for refurbishment of this infrastructure where required based on quotes provided by reputable independent vendors to an appropriate standard of detail. Allowance has been made for earthworks including road refurbishment and construction, and clearing for mining contractor facilities required at Matilda.</li> </ul>
<p><i>Metallurgical factors or assumptions</i></p>	<ul style="list-style-type: none"> <li>• <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li>• <i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li>• <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The proposed process for most of the material is Crush-Grind-Gravity-Leach-CIL, a standard gold processing flowsheet used throughout the industry for this style of mineralisation.</li> <li>• The East-West underground ore material is expected to be processed using the existing installed BIOX circuit. This circuit was operated successfully on this type of material for over 20 years during previous operations.</li> <li>• Enough recent processing plant production data exists to estimate metallurgical recoveries and throughput rates to a suitable degree of accuracy. Recoveries have been applied to individual mines by weathered material type.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Any assumptions or allowances made for deleterious elements.</i></li> <li>• <i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></li> <li>• <i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<ul style="list-style-type: none"> <li>• Metallurgical testing has been performed on diamond drill holes in well-known and recognised laboratories to standard test practices on a sufficient number of samples to be representative of the different domains.</li> <li>• No deleterious elements were detected however some of the ore sources may require alternative unit processes.</li> </ul>
<i>Environmental</i>	<ul style="list-style-type: none"> <li>• <i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Environmental impacts and hazards are being considered as part of the DOIR application process.</li> <li>• Historical data indicates that the rock mass is non-acid forming.</li> <li>• Tailings from ore processing will be stored within the existing Tailings Storage Facility (TSF). Allowance has been made for expansions to this facility as required by the mine plan.</li> <li>• At this point in time the Competent Person sees no reason why permitting will not be granted within a reasonable time frame.</li> </ul>
<i>Infrastructure</i>	<ul style="list-style-type: none"> <li>• <i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Substantial infrastructure exists on-site at the Wiluna mine from previous operations (which ceased in 2013 and have been on care and maintenance since that time), and refurbishment of this infrastructure has been allowed for in the detailed cost model. The site is located proximal to the township of Wiluna and the Goldfields Highway. The Wiluna airport services both the mine and the town.</li> </ul>
<i>Costs</i>	<ul style="list-style-type: none"> <li>• <i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li> <li>• <i>The methodology used to estimate operating costs.</i></li> <li>• <i>Allowances made for the content of deleterious elements.</i></li> <li>• <i>The source of exchange rates used in the study.</i></li> <li>• <i>Derivation of transportation charges.</i></li> <li>• <i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></li> <li>• <i>The allowances made for royalties payable, both Government and private.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Existing infrastructure refurbishment capital estimates are based on quotes from vendors following inspections.</li> <li>• Surface mining capital costs including contractor mobilisation and set-up and site preparation have been estimated based on contractor quotes. Initial pit dewatering costs have been estimated based on analysis by an independent hydrological consultant.</li> <li>• Underground mining capital costs have been estimated based on contractor quotes, recent vendor quotes or estimates for refurbishment of capital infrastructure following inspection by independent experts.</li> <li>• Mining operating costs have been estimated based on expert contractor quotes. Power, diesel and accommodation costs have been determined based on vendor quotes. Staff costs have been assumed based on current market salary levels.</li> <li>• Processing operating costs were determined based on historical figures from previous operations, with adjustments made for updated input costs based on current prices.</li> <li>• No deleterious elements are expected to report through the process into the saleable product.</li> <li>• All costs have been estimated in Australian dollars.</li> <li>• All costs had transportation charges built into the final</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>figure. No transportation charges were assumed for the product as it will be transported from site on scheduled flights.</p> <ul style="list-style-type: none"> <li>A 2.5% WA state government royalty has been allowed over all the mines. An additional 5% royalty has been applied over the Matilda pits based on an existing agreement. This 5% royalty was also applied over the Wiluna material after 200 koz has been produced from these tenements. The 5% royalty was applied to the portion of the Galaxy pit which falls within the tenement over which the royalty holds (approximately 66% of metal produced from the Galaxy pit).</li> </ul>
<i>Revenue factors</i>	<ul style="list-style-type: none"> <li><i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i></li> <li><i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></li> </ul>	<ul style="list-style-type: none"> <li>Production for revenue calculations was based on detailed mine plans and mining factors.</li> <li>The assumed metal price used for revenue calculation was A\$1,550/oz, being the average price for the 2015 calendar year.</li> </ul>
<i>Market assessment</i>	<ul style="list-style-type: none"> <li><i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li> <li><i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li> <li><i>Price and volume forecasts and the basis for these forecasts.</i></li> <li><i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></li> </ul>	<ul style="list-style-type: none"> <li>Gold doré from the mine is assumed to be sold at the Perth mint as soon as it is produced.</li> </ul>
<i>Economic</i>	<ul style="list-style-type: none"> <li><i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i></li> <li><i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Ore Reserve estimate is based on a financial model that has been prepared at a Pre-Feasibility study level of accuracy economic modelling. All inputs from underground operations, processing, transportation and sustaining capital as well as contingencies have been scheduled and evaluated to generate a full life of mine cost model.</li> <li>Economic inputs have been sourced from suppliers or generated from database information relating to the relevant area of discipline.</li> <li>A discount rate of 5% has been applied.</li> <li>The NPV of the project is positive at the assumed commodity price. The Competent Person is satisfied that the project economics based on mining the Ore Reserve retains a suitable margin of profitability against reasonably foreseeable commodity price movements.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Social</i>	<ul style="list-style-type: none"> <li><i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i></li> </ul>	<ul style="list-style-type: none"> <li>To the best of the Competent Persons knowledge all agreements are in place and current with all key stakeholders including traditional owner claimants and residents of Wiluna.</li> </ul>
<i>Other</i>	<ul style="list-style-type: none"> <li><i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></li> <li><i>Any identified material naturally occurring risks.</i></li> <li><i>The status of material legal agreements and marketing arrangements.</i></li> <li><i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i></li> </ul>	<ul style="list-style-type: none"> <li>A formal process to assess and mitigate naturally occurring risks will form part of ongoing studies, however has not been complete at this stage. Currently, all naturally occurring risks are assumed to have adequate prospects for control and mitigation.</li> <li>The approvals process for commencement of operations is underway. Based on the information provided, the Competent Person sees no reason why all required approvals will not be successfully granted within the anticipated timeframe.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Ore Reserves into varying confidence categories.</i></li> <li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> <li><i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i></li> </ul>	<ul style="list-style-type: none"> <li>The Probable Ore Reserve is based on that portion of the Indicated Mineral Resource within the mine designs that may be economically extracted and includes an allowance for dilution and ore loss.</li> <li>The Proved Ore Reserve is based on that portion of the Measured Mineral Resource within the mine designs that may be economically extracted and includes an allowance for dilution and ore loss.</li> <li>None of the Probable Ore Reserves have been derived from Measured Mineral Resource.</li> <li>The result appropriately reflects the Competent Person's view of the deposit.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Ore Reserve estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Ore Reserve estimate, along with the mine design and life of mine plan, has been peer-reviewed by Entech internally.</li> </ul>
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"> <li><i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within</i></li> </ul>	<ul style="list-style-type: none"> <li>The design, schedule and financial model on which the Ore Reserve is based has been completed to a Pre-Feasibility study standard, with a corresponding level of confidence.</li> <li>There is a degree of uncertainty associated with geological estimates. The Reserve classifications reflect the levels of geological confidence in the estimates.</li> <li>The Ore Reserve is based on a global estimate.</li> <li>There is a degree of uncertainty regarding estimates of impacts of natural phenomena including geotechnical</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</i></p> <ul style="list-style-type: none"> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i></li> <li>• <i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<p>assumptions, hydrological assumptions and the modifying mining factors, commensurate with the level of study.</p> <ul style="list-style-type: none"> <li>• There is a degree of uncertainty regarding estimates of commodity prices and exchange rates, however the Competent Person is satisfied that the assumptions used to determine the economic viability of the Ore Reserves are reasonable based on current and historical data.</li> <li>• Further, i.e. quantitative, analysis of risk is not warranted or appropriate at the current level of technical and financial study.</li> </ul>